A POPULAR HISTORY OF THE GREAT WAR

A Popular History of The Great War

BEATTY'S HOUR OF TRIUMPH. This fine photograph of a great and dramatic episode in Britain's long and glorious naval history shows Admiral Sir David Beatty, with whom is Flag Captain Chatfield, watching the surrender of the German Fleet off Rosyth, on November 21, 1918. For over four years Admiral Beatty was Britain's most popular naval figure, the hero of the fights of Heligoland Bight, Dogger Bank and Jutland, and commander of the Grand Fleet from November, 1916.

A POPULAR HISTORY OF THE GREAT WAR

Edited by SIR J. A. HAMMERTON

Complete in six volumes with
about 1000 maps & illustrations

Volume V

THE YEAR OF VICTORY: 1918

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PREFACE TO FIFTH VOLUME

THE fifth and present volume of A POPULAR HISTORY OF THE GREAT WAR carries the story from January 1, 1918, to the conclusion of hostilities early in November, thus leaving to the sixth and final volume the record of the events that followed the armistices, especially the peace treaties, the foundation of the League of Nations, and the consequent issues of Reparations and Disarmament.

The Great War lasted just over four years and three months, or only a few weeks longer than its nearest historical parallel, the American Civil War, and the period covered by this volume is probably richer in dramatic incident than any of the four that preceded it. Its mutations include advances and retreats, thrilling contrasts of victory and defeat, elation and despair. In March the British line was broken and the Channel ports were in serious danger of capture for the first time since 1914; in May the Germans, after an advance of unusual rapidity, were only about 40 miles from Paris. It was about this time that Sir Douglas Haig addressed to his shaken, but indomitable, men the memorable words, "With our backs to the wall, and believing in the justice of our cause, each one of us must fight on to the end"; and that Marshal Foch told the defenders of Amiens not a yard of ground must be yielded, while the veteran premier, Clemenceau, showed the same spirit when he said "I shall fight in front of Paris; I shall fight in Paris; I shall fight behind Paris."

The Allied cause had never been in more desperate case than it was when these words were spoken, but in a few weeks there was a change as remarkable as any in the long history of war. As in 1914, the Germans were checked on the line of the Marne. Then in August the Allies began the final and victorious advance that recovered the ground lost in 1914 and in the spring of 1918. By a strange coincidence the British troops on the morning of November 11 reached the very spots, Mons and neighbourhood,

where they had stood in line of battle on that memorable Sunday in August, 1914.

The advance that began in August was the culminating event of the year's operations and justified the title of this volume, "The Year of Victory." It meant that the war of movement, which had been suspended in the West since November, 1914, had been renewed. The lines of trenches that during the intervening period had proved, in spite of the vast expenditure of men and material, an impregnable barrier had been taken at last, and the way to the Rhine was open. After four weary years of waiting the huge steamroller was on the move, but it came from the West, not, as many expected in 1914, from the East.

Nineteen-eighteen was a year of victory, too, in the other theatres of war. Helped by British and French troops the Italians, after their disaster at Caporetto, stood firm on the Piave, and from there began an irresistible advance that ended in Austria's surrender on Austrian soil. The movement from Salonica was another contribution to this end, and brought about also the surrender of Bulgaria. Palestine and Syria were conquered, and with Mesopotamia in like state, most of the dominions formerly ruled by the sultan of Turkey were in British and French hands. The intrepidity of British airmen met and conquered the danger from the raiding Zeppelins, and the seamen overcame the more serious perils from German submarines. The remark attributed to the wise old Cretan Venizelos had again proved true: "England in all her wars has always gained one battle—the last."

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A POPULAR HISTORY OF THE GREAT WAR

Volume V

CHAPTER 1

The Opening Months

THE year 1918 opened darkly for the Allies. The terrible losses in men and material in the protracted fighting in the third battle of Ypres, the disgraceful armistice terms imposed upon Russia by the Germans at Brest-Litovsk in December, 1917, and the crushing defeat of the Italians at Caporetto were events that cast a gloom on the Allied horizon. Even President Wilson's famous 14 points—the programme of the world's peace—which were published early in January, seemed hardly to help. In retrospect the scene seemed like a grey overcast morning with the sun only occasionally piercing through lowering clouds. The prime minister, Mr. Lloyd George, would have preferred to have received troops rather than 14 points from America, but he went on with his task unhesitatingly.

On the other side of the picture were certain definite glimmerings of hope. On December 9, 1917, Jerusalem had surrendered, and the goal of the Crusaders, which had been in the hands of the Moslems ever since the days of Saladin, was once again in Christian occupation. In Mesopotamia General Marshall was steadily advancing towards the complete conquest of that land.

The situation on the west front, however, was ominous. A strange silence brooded over the battlefields, which the Allied

command interpreted as the lull before the storm. In those first months of 1918 steadily increasing masses of German troops were gathering in the lines in the confident hope that the war would be ended before the United States could bring reinforcements for the Allies—if, indeed, in the face of the submarine menace, she could bring them in at all.

To the Allies, on the other hand, it seemed obvious that they must remain virtually on the defensive until those new forces should arrive to give them an actual preponderance—a preponderance which, until their coming, must rest with the Germans. It was, in effect, certain that the enemy would seek to force a decision; in the spring their great offensive would be launched; they must stake everything on it, since their chance could hardly come again.

The British had just been called upon to take over a part of the French line south of St. Quentin. The American troops were only beginning their training, and though a small American force had appeared in Europe the problem for the Allies was one of unequalled gravity. It was to resist the German legions, strengthened as these were by the armies which had hitherto been occupied on the eastern front, until the American units could complete their equipment and training, and could arrive. The problem was complicated by the utter uncertainty which attached to the submarine position. On January 1 the prime minister issued a memorable New Year's message to the people of Great Britain. He appealed to them "to do their utmost in these later trying days for the cause for which the democracies of the world are now linked together." Then he continued with these words:

> The sacrifices which the men—and the women also—are making we all know. Despite all that they have gone through, they are still facing frost, mud, privation, and suffering wounds and death, with undaunted courage that mankind may be freed from the tyranny of militarism and rejoice in lasting freedom and peace. No sacrifice that we who stay at home are called upon to make can equal or faintly approach what is daily and hourly demanded of them. So long as they are called upon to endure these things let us see to it that we do not take our ease at the price of their sacrifice. There is nobody too old or too young or too feeble to play a part. If we cannot fight in person, we can fight by the vigour and good will with which we do our work, the wisdom of our economy, the generosity with which we meet the nation's financial needs.

At the moment, lending and saving are specially important. Money is essential to victory, and economy is the condition of financial power. It is, therefore, the duty of all to save what they can and to lend what they can to the community at this time. Every man, woman and child ought to make it a point of honour to increase his holding of National War Bonds as the year goes by, bonds which have behind them the whole strength and credit and resources of Britain itself.

To every civilian, therefore, I would say: "Your firing line is the works or office in which you do your bit; the shop or the kitchen in which you spend or save; the bank or the post office in which you buy your bonds." To reach that firing line and to become an active combatant yourself there are no communication trenches to grope along, no barrage to face, no horrors, no wounds. The road of duty and patriotism is clear before you; follow it and it will lead ere long to safety for our people and victory for our cause.

In February, 1918, Sir William Robertson resigned his post as chief of the imperial general staff. His resignation was due to a change in the constitution of the supreme war council at Versailles, which made the British permanent military adviser to the council, although in constant communication with the chief of the imperial general staff, free to act in every case on his own judgement. Sir William Robertson thought that the military representative at Versailles should be the deputy of the chief of the imperial general staff, urging that this was essential on military grounds. The government could not accept this view, and Sir William was succeeded by Sir Henry Wilson.

The great German offensive that began on March 21, 1918, brought about a far more important change than this. On March 24 General Pétain informed Sir Douglas Haig that he had been instructed by the French government that if the German advance continued he was to withdraw his army to cover Paris. This would have meant the separation of the French and British armies, and Sir Douglas Haig's original instructions from Lord Kitchener were that he was to keep in touch with his ally at all costs. In these circumstances Sir Douglas appealed to the War Cabinet. One of its members, Lord Milner, who was already in France, acted with great promptitude and arranged for a conference to be held at the little town of Doullens on March 26. Those who attended it were Lord Milner, who was soon to become war secretary, Sir Henry Wilson, M. Raymond Poincaré, the president of the French republic,

M. Clemenceau, the prime minister, M. Loucheur, the French minister of munitions, Sir Douglas Haig and his four army commanders, General Foch and General Pétain.

Mr. Lloyd George had for a long time favoured a unity of command on the western front, and it appeared to be the only solution in the crisis which had now arisen. At first it was proposed that only the French and British armies around Amiens should be put under the command of General Foch, but Sir Douglas Haig pressed upon the conference the necessity of having one generalissimo for the whole of the Allied armies from the North Sea to Switzerland, and eventually he had his way. But the British government was in doubt as to how this change would be received by the British soldiers and public, and there was some discussion as to the form in which it was to be announced. When, however, on April 14, the fact was made public that General Foch had been appointed commander-in-chief of the British, French, American and Belgian armies, the news was received with relief and satisfaction. The United States was not represented at Doullens as General Pershing was too far away, but as soon as he was informed of the proposed change he expressed his cordial agreement with it.

During the latter part of 1917 the German submarine campaign was having a more and more deleterious effect on British food supplies. The government's appeal for voluntary economies had done but little to help, and the difficulties which women encountered in shopping rapidly increased. Mrs. C. S. Peel in her book, "How We Lived Then—1914-1918," writes:

> Women used to go from shop to shop trying to find one at which they could buy meat or margarine, tea, and possibly a little extra sugar. The rich escaped these unpleasant tasks, partly because they could send servants to shop for them and partly because the customer who bought on a large scale could still have his goods delivered at his house, though by now the cart or motor was generally in charge of a woman, and women had taken the place of the younger men both in butchers' and grocers' shops. Notices were displayed in shops and stores asking customers to carry their own parcels whenever possible, and roomy baskets and bags became fashionable adjuncts to the toilette. The master bakers begged customers not to waste the time of their employees by chatting to them when they delivered goods. The conduct of certain tradespeople, who at this time shut their shops to the general public and sent out meat and other goods to favoured customers via the back

door, infuriated the people, and occasionally luckless butcher boys were held up and the contents of their baskets looted. The knowledge that some well-to-do folk were hoarding food also caused discontent. It was these annoyances which made local authorities adopt rationing schemes before national compulsory rationing came into force.

The shortage of certain articles of food became evident early in 1917, and in July of that year a system of rationing sugar became necessary. A sugar card entitled the holder to a weekly allowance of half a pound, and the sugar commission had the situation so well in hand that it was possible to carry out the rationing without disappointment to anyone.

Early in 1918 the shortage of margarine, bacon, cheese and tea became more acute. Local food committees had already been established in many places, and at a meeting of the executive officers of the London committees held on January 4, 1918, it was decided to ask the food controller, who had been first appointed in December, 1915, to sanction a larger scheme of rationing essential foods for London and the home counties.

The first rationing scheme was designed to deal with about 10,000,000 people. Two separate cards were issued, one for meat and one for butter and margarine. The purchaser had to deposit a counterfoil with a retailer, and retained a book of coupons with numbered spaces which were marked off as purchases were made. Each retailer was guaranteed by the controller a supply of meat and fats sufficient to meet the demands of the customers who were registered with him. Based on the experience gained in sugar rationing, this scheme was an immediate success. Returns prepared by the police showed that, towards the close of 1917, something over 1,250,000 people lined up every week outside retail shops for food.

While London and the home counties came under the rationing scheme devised by the food controller, the rest of the country depended for its food supply entirely on the work of local food councils. This was unsatisfactory compared with the results achieved in the London area, and in April, 1918, it was decided to extend the food control scheme to the whole country. This change came into force on April 7, 1918, but it did not attain its final shape until July of that year. From then the ration cards, which were in use with only one alteration until the end of the war, were issued. The books contained detachable coupons for meat, bacon, fats, sugar and lard. The one change

was that in November, 1918, jam was rationed, and the books were printed with coupons for that article also. The system was so completely worked out that each ration book contained additional coupons to be used if at any moment it became necessary to ration another article of food. It seemed at one time possible that bread might have to be rationed. This never became necessary, but the bread which the British people had to eat during 1918 was very different from the ordinary white loaf to which they had been used. A large proportion of substitutes for wheat flour were used by bakers. The bread that resulted was dark in colour, rough in texture and often unpleasant in flavour ; but it was never necessary to ration it. In special cases, invalids and aged people, for instance, extra rations could be issued.

Under the rationing scheme the amounts to which each individual was entitled per week were roughly as follows: 1 lb. of uncooked meat, 6 ozs. of butter and margarine, 2 ozs. of lard, 4 to 8 ozs. of bacon and ham according to the district, and 8 ozs. of sugar, 1½ ozs. of cheese, and 1½ ozs. of tea. The meat coupon represented not a fixed quantity, but a money value, and the prices shown on the schedule hung in butchers' shops were fixed as closely as possible in accord with the food value of the commodity.

The registration system involved reorganization of the trade in the rationed article in order to secure that each retailer might be supplied with the quantities required to meet the demands of his registered customers. No system of ration cards could be successful without a corresponding organization of supply and distribution at all stages. It was necessary to have control at each point, while the maintenance of a reasonable reserve was highly desirable. Before any system of individual rationing was attempted it had been necessary to regulate supplies and prevent the competition bound to arise as soon as any signs of shortage were evident. Importers, wholesalers and retailers of the principal foods were registered, each being allowed to dispose of a certain percentage of the supplies he had held in 1916. The retailer was " tied " to his wholesaler, and the wholesaler to his importer. But in munition and other centres changes of population made it essential to modify this system. In the case of margarine, the consumption of which was enormously increased, a system of distribution was set up for this purpose with a clearing house in London.

Meat supplied from local markets, as well as from imported supplies, presented a very difficult problem. Eventually the country was divided into areas, each covering a group of counties, rationed according to home-killed supplies and population. Deficiencies were supplied by authorized wholesalers, and surpluses in the meat-producing counties transferred to industrial centres. Local divisions in an area were again rationed, and the butchers formed local committees to apportion the meat allotted to their town or district. Rationing in this case involved an extremely complex and complete reorganization of the trade, including official supervision of markets and of slaughter-houses. But rationing, on the whole, made for equality and contentment.

The provision of food for the population at home was only one of the anxieties that faced the British government. One of the consequences of the great call for men for the army during the early months of 1918 was that about 30,000 young men who had hitherto been working on the land and were exempt from military service were called up. The time of the potato harvest was drawing near, and it was imperative that farmers should be provided with sufficient labour. An appeal was made to schoolboys to give a part of their holidays to the work, and Mr. Lloyd George issued a special appeal to women. It was in these terms:

> The fields are ripening for the sickle; the toil of the winter and the spring is earning its reward. This is no ordinary harvest; in it is centred the hope and the faith of our soldiers that their own heroic struggle will not be in vain. In the days before the war the whole world was our granary. Now not only are thousands of men fighting, instead of tilling our own fields, but the German submarines are trying to starve us by sinking the ships which used to carry to our shores the abundant harvests of other lands.
>
> Women have already served the Allies by their splendid work upon the farms, but the army in France has asked for still more men from the land to come and help their brothers in the desperate battle for freedom. These men must go; women will be first to say it. But the harvest is in danger for want of the work these very men would have done. Once again, therefore, as often before, I appeal to women to come forward and help. They have never failed their country yet; they will not fail her at this grave hour. There is not a moment to lose.
>
> Every woman who has the great gifts of youth and strength, if not already devoting these to essential work for her country,

should resolve to do so to-day. If she lives in a village, let her go out and work in the fields from her home. If she can give her whole time let her join the ranks of the Land army. From the nearest employment exchange she can learn all about the conditions of service. I have watched with deep interest and admiration the splendid work already done; never have British women and girls shown more capacity or more pluck; and just as the soldiers have asked for thousands more men to come and help them to win the war, so do these brave women in the villages and in the Land army call to other women to come and help them save the harvest. I know this appeal will be heard. Ask the women who have already shown the way what they feel; they will declare that work in the fair fields of our green island is a privilege as well as a duty.

The government made strong appeals to farmers to produce all they possibly could, and especially cereals and potatoes. There had been a serious shortage of potatoes in 1917 with the inevitable result that in 1918 there was a danger that the supply of seed potatoes would run short. However, the food controller succeeded in distributing over 15,000 tons, and in this way the peril was averted.

Many of these seed potatoes went to allotment holders. The government had asked everyone who could do so to take up an allotment, and under the Defence of the Realm Act local authorities were empowered to seize any unoccupied land and convert it into allotments. In London, portions of public parks were divided up into allotments, and amateur gardeners raised crops of vegetables in such places as Clapham Common, Regent's Park and Hampstead Heath. This movement had begun in 1917, and by the summer of 1918 there were probably well over 100,000 allotments in England and Wales. As the season was a good one, large crops were raised which did much to alleviate the food shortage.

While every effort was being made to balance the shortage of sea-borne food supplies with home products, the prevention of waste was one of the problems always before the food controller. With this object a system of national kitchens was established in June, 1918. An experimental kitchen had been established at Poplar some months earlier and had proved a great success. Waste was eliminated to such an extent that a large profit was shown, and the popularity of the idea was proved by a continuous increase in the number of national kitchen patrons.

The submarine campaign, together with the great call for wool for army uniforms and equipment, caused a serious shortage of civilian clothing early in 1918. The prices of such clothes as could be bought were far beyond the means of poorer people, and in June, 1918, a system of standard clothing was adopted. The board of control of textile industries undertook to produce goods to the value of about £15,000,000, and the prices at which they were to be sold were fixed by the government. Men's standard suits cost 84s. and 57s. 6d.; and overcoats 63s. Suits for youths 70s. and 50s., and overcoats 45s.; and for boys 45s. and 40s., and overcoats 35s.

The shortage of coal, too, began to be serious early in the year, and it became imperative that the strictest economy in the use of every sort of fuel should be enforced. To help this, summer time began on March 24—earlier than in the previous year—and continued for 26 weeks. In March a drastic order, sometimes called the curfew order, was made by the president of the board of trade, Sir Albert Stanley, later Lord Ashfield. Under this order theatres, cinemas and all other public places of entertainment were to put out the lights by 10.30 p.m. Lights were not to be used to illuminate shop windows. No hot meals were to be served, nor any cooking done in any hotel, restaurant, boarding house or club between 9.30 at night and 5 o'clock in the morning. The railway services were further cut down, and an order was made, applying to London, the home counties and the west of England, restricting the consumption of gas or electricity on any premises to not more than five-sixths of what had been consumed on those premises in the corresponding quarter of the previous year.

In April, 1918, after the Germans had made their great attack, the question of man-power again became an urgent one, and on the very first day of the new session of Parliament, which opened on April 9, the prime minister introduced "a bill to make further provision with respect to military service during the present war." A number of men who had hitherto been exempted on the ground that they could not be spared from essential industries were to be called to the colours. The munition works were to release fit men to the number of about 100,000 and another 50,000 were to be withdrawn from the coal industry.

At this time the urgency of the situation called for even more drastic measures. The age limit, which to many seemed already unduly high, was raised again. Until then no man over 41 years of age had been liable for military service. The new bill raised the age to 50 for every able-bodied man, and in some cases provided that men up to 55 years of age, who had special qualifications, might be called up for service. It was estimated that only about seven per cent of the men between 41 and 50 years of age would be fit to fight. The new measure also made changes in other matters. Certificates of exemption were to be withdrawable by royal proclamation; the local tribunals, which had hitherto been empowered to grant exemption at their discretion, were to be reconstituted, and they were to be bound by conditions which would considerably curtail their previous powers. The bill brought ministers of religion within its scope for non-combatant service, and, more important still, it extended the scope of the military service acts to Ireland. The bill became law on April 18—10 days after its introduction in the House of Commons. As a return for the inclusion of Ireland in the act a measure giving home rule to Ireland was promised.

While the bill was passing through the House of Commons it met with some opposition on the ground that few men of 50 and over would be fit for service, but the prime minister pointed out that many men of 50 and over were serving in the French and German armies, and he declared that men of this advanced age were included in the bill only because the government intended it to be the last man-power bill of the war.

The first few months of 1918 saw one of the most remarkable constitutional changes which have ever taken place in Great Britain. An extension of the franchise unparalleled in any other measure of the kind came into force on February 6, 1918. It gave the parliamentary vote to every woman who was either a local government elector or the wife of one. The new act also gave the vote to all men of 21 years of age after six months residence or occupation of business premises. Special consideration was given to the fighting soldiers and sailors. They were allowed to vote in the constituency for which they would have qualified but for their military service, and as men had been thought fit to fight for their country at 18 they were allowed to exercise the franchise at 19 years of age.

CHAPTER 2

The Treaty of Brest-Litovsk

At the end of December, 1917, when the negotiations between Russia and the Central Powers at Brest-Litovsk were adjourned, the position was that the Central Powers had agreed to accept a peace without indemnities or annexations provided that the Allies approved and would join in the negotiations. When the conference resumed on January 4, 1918, the Allies had not even replied to a suggestion for peace on these lines; and, on January 10, Trotsky announced that Russia would negotiate a separate peace. He demanded that Germany should evacuate Russian territory, including Poland, and, when she declined, the conference was again adjourned until January 30.

Germany now determined to bring pressure to bear. A request for the transfer of the venue of the negotiations to neutral territory was received by the German foreign minister, but he refused it peremptorily. He insisted that, as the allies of Russia had taken no action towards peace during 10 days' suspension of negotiations, which had been agreed to on December 25 so that they might join in the proceedings, all the conditions previously settled had lapsed. Germany would require Russia to conclude a separate peace or to face the consequences, among which would be war to the knife. Count Czernin, the Austrian foreign minister, followed in much the same terms. If Russia would not conclude a separate peace, he said, "then things will take the necessary course, but the responsibility for the continuation of the war will fall exclusively on the gentlemen of the Russian delegation."

The Russian delegates dared not break off the negotiations. Their only chance of retaining power lay in securing peace. Trotsky at once lowered his tone, and the armistice was extended till February 18, and negotiations were transferred to Warsaw. There were good reasons for this surrender. One part of Russia, the Ukraine, which covers the whole of South Russia between the Caspian Sea and the boundaries of Rumania and Poland, except the country of the Don Cossacks, had refused to recognize

the Bolshevist government, and in November, 1917, had declared a separate republic. In February, 1918, a Bolshevist army invaded the country and had an easy victory over the disorganized Ukrainians. After a few days of fighting the Russians took Kieff and deposed the government. In this extremity the Ukraine entered into peace negotiations with the Central Powers, and on February 9 a peace treaty was signed. The conditions which Germany had granted to the Ukraine were not disclosed till February 13. The Ukraine became, in effect, a German protectorate. The Germans and their allies were given exceptional commercial privileges, such as before the war they had enjoyed in Russia. They were granted the first call on the foodstuffs and raw materials of the Ukraine, and there was a stipulation to the effect that railway traffic was to be resumed as soon as possible.

Each party to the treaty undertook to permit the prisoners of the other side to return home, so far as they did not decide to remain in the country which had captured them—a provision which enabled the Germans, if they so desired, to use their Ukraine prisoners for forced labour. Provided the Ukraine satisfied its German conquerors, it was to be granted a large slice of Poland—nothing less than the province of Brest-Litovsk. But the boundaries of the Ukraine north-eastward and south-eastward were left undetermined. Thus Germany's new vassal state could be extended indefinitely according as events shaped in Russia. On the lowest estimate the Ukraine would become a state of 200,000 square miles, with a population of 30,000,000. On the largest estimate, and supposing it to extend to the Caucasus, it would have had an area of over 300,000 square miles and a population of 40,000,000.

The Bolshevist government found itself also embarrassed by revolts in other territories besides Ukrainia which had once been part of the Russian empire. After the revolution of November, 1917, Finland declared her independence, but the Finns were divided into the Red, or Bolshevist party, and the Whites, or constitutional party. The Whites, failing to get help from the Allies, called in German forces to help them, while the new government of Russia supported the Reds. In the end the Whites, with German help, were victorious, and a treaty of peace was concluded between Germany and Finland, wholly to Germany's advantage, but it was among those annulled in

November, 1918. There was yet another force hostile to the Bolshevist government to be dealt with. In the northern Caucasus, General Kaledin, who in September, 1917, had been elected hetman of the Cossacks, had attempted, in conjunction with General Alexeieff, to raise an anti-revolutionary army. But the men upon whom he pinned his faith wavered before Bolshevist attacks, and General Kaledin, when he saw that resistance was hopeless, committed suicide.

While Russia was busy with these internal troubles and was anxious to bring the rebels to heel, Germany, having obtained no satisfactory results from the Brest-Litovsk negotiations, ignored Russia's declaration that she was out of the war and resumed military operations along the whole front. On February 18 the German armies advanced along the whole eastern front and made a great thrust towards Petrograd. One after another the Russian towns, which had been so strenuously defended a year before, fell into German hands, and the advancing armies took over 1,000 guns besides vast quantities of stores.

The Russian commander-in-chief was unable to cope with such a situation. He advocated stealthy resistance by small armed bands, which were, of course, powerless to check the onward rush of the enemy. For such small bodies of troops as attempted resistance were without leaders, and soon threw down their arms and ran for their lives. A general flight from Petrograd began, and the trains going east were packed with refugees, soldiers struggling with civilians for places in the coaches.

Any further resistance to the German peace terms was impossible. On February 18 a message had been sent to Berlin accepting them in their entirety, but it was ignored. On February 24, after a debate in the Soviet, Lenin made a speech advocating instant peace. He said of the Germans:

> Their knees are on our chest, and our position is hopeless. This peace must be accepted as a respite, enabling us to prepare our decisive resistance to the bourgeoisie and imperialism.

At noon that day a Bolshevist proceeded under a flag of truce to the German lines to hand in Russia's submission to all Germany's demands—immediate and unconditional surrender. He was allowed to pass, but no answer was vouchsafed. Krylenko, the Russian commander-in-chief, inquired whether the German high command regarded the war as ended, and he, too, was ignored. The German troops continued their resistless

march. They were now in Reval, the great Baltic base of the Russian navy; they were in the important railway junction of Pskoff, only eight hours from Petrograd; they were in Vitebsk, another important junction; they were moving towards Bologye, a vital point on the last railway connecting Petrograd with Moscow and the south; they were nearing Kieff; they were reported to be landing in Finland. Simultaneously the Turks were pressing on in Armenia. Trebizond was reoccupied. Erzerum, Kars, and the whole Caucasian coast were open and unguarded. There was nothing to prevent any resolute enemy of Russia from helping himself. From every quarter ravenous foes were closing in upon the mob of uneducated peasants and ignorant workmen who had sold their birthright in the belief that Germany was thirsting for peace.

At last, on March 3, the Germans condescended to notice the surrender of the Bolshevists. That night their wireless announced that "by reason of the signing of the peace treaty with Russia, the military movements in Great Russia have ceased." They still continued to advance in the vast territories which Germany was tearing from her dupes, and that very day it was known that a large German fleet had seized the Aland Isles in the Baltic. The terms which Lenin and Trotsky accepted placed the Germans permanently within 100 miles of Petrograd, and almost shut Russia out from the sea. Finland, Esthonia, Livonia, Courland, Lithuania, Poland, and the Ukraine all had to be surrendered to Germany for disposal, or for what the Germans called "self-determination." In the Caucasus the territory which the tsars 40 years before had conquered from Turkey was to be restored to the sultan. Kars, Ardahan, and Batum, for nearly half a century Russian towns, had to be given up. All propaganda work against Germany was to be stopped.

On the economic side they were made to grant Germany all the special privileges she had enjoyed in Russia under the commercial treaty of 1904, and to guarantee the duty-free export of ore. The "conscription of capital" and "nationalization of all the means of production," which the Bolshevists had proclaimed, were summarily stopped, for wherever Germans owned shares in banks or factories or mines they could claim immunity, and to touch them was to break the treaty. The Russian army was to be demobilized and Russian warships disarmed or immobilized. The political and economic independence of Persia and

Afghanistan were to be respected. There were to be no indemnities. Prisoners were to be exchanged. Diplomatic relations were re-established and economic regulations revived the commercial treaty of 1904 between Russia and Germany, which was so disadvantageous to the former. Territorially the result of the treaty was to put back the frontier of Russia to where it had stood in the 17th century. It subsequently appeared that instead of there being no indemnity the Bolshevists had agreed to pay 300,000,000 gold roubles to Germany. The treaty of Brest-Litovsk was annulled by a proviso of the armistice of November 11, 1918, and the sum which had been paid to her on account by the Bolshevists was afterwards recovered by them.

The full terms of the treaty with the appendices were not published at once, seemingly because Lenin and Trotsky did not dare to confess to a wrecked and ruined Russia what treason they had committed. But, so far as the terms were divulged, they left Russia with a frontier which ran from Narva southward to Dvinsk, and thence to Pruzhany, on the frontier of the Ukraine. The exact area of the Ukraine was left in doubt, but according to German maps it included all southern and south-central Russia, and ran to the Caucasus range, and it could be indefinitely extended. In addition to the territory which Russia had finally to renounce, a large area remained in German occupation, with a promise of future evacuation ; but it was almost daily increased on various pretexts.

The German military frontier on March 15, 1918, extended from Narva in the north to a point slightly east of Odessa. German troops were close to Vitebsk and Mohileff, and within striking distance of Moscow itself, whither the seat of Russian government was removed on March 10. Other German forces were at Abo in Finland, where a landing was effected early in March, and there were reports that one of the Hohenzollerns was to receive the Finnish crown. The total territory permanently abandoned by Russia covered an area of over 500,000 square miles of rich and valuable country, and if the Germans extended the Ukraine frontier this might be indefinitely increased.

In German occupation were 70,000 square miles of additional territory, outside Finland, the Ukraine, and the other areas ceded by Russia, and there was no security of any kind that the Germans would not permanently retain this land, since the Bolshevists had destroyed Russia's social organization, finance,

and military and naval forces. Many Russian warships in the Baltic and Black Sea were seized without resistance, though by a sudden counter-stroke of the Black Sea fleet Odessa was recaptured at the end of March. German agents advanced with impunity into Siberia, and bands of armed and disciplined German prisoners destroyed important points on the Siberian railway to prevent any action by Japan.

While the Germans acted and moved, the Allied governments conferred and talked. So grave was the peril to all Asiatic Powers, and in particular to Japan, China and Great Britain, so easy was the path opened to Germany by the utter collapse of resistance in Russia and the systematic destruction of the Russian educated and civilized class, that a swift occupation by Japan of the Siberian railway was urgently required to prevent the Germans from making Siberia a new and vast German field of exploitation and supply. Such Japanese action would have been welcomed by patriotic Russians; it might even have led the Bolshevists to pause in their surrender to the German foe.

But, as had happened so often before in critical moments of the war, the Allies at this supreme hour failed in clearness of aim and concentration of effort. They still sunned themselves in the illusion that Russia, after she had committed suicide, could be resurrected swiftly, and that she was vigorous and alive. They did not understand that where Napoleon had failed the kaiser had succeeded; that where Napoleon had destroyed his own fighting strength in an impotent stroke against Russia, the kaiser had levelled Russia in the dust and made of a once gigantic foe a magazine of man-power and supplies.

Bolshevist Russia had abandoned the war, and had become what Italy was in the eighteenth century, "a geographical expression." Her peoples, who under nobler leadership might have fought resolutely for their national freedom, bartered it for an easier life and sank to the tragic position of slaves. On the Slav races they brought ruin and agony, and that which is crueller than either—shame—justifying anew Gibbon's taunt, and degrading "the national appellation of the Slavs from the signification of glory to that of servitude."

Trotsky, in his book "The Russian Revolution," sums up the reasons for accepting these stern terms thus:

> The new German offensive developed under conditions which were deadly to Russia. Instead of the agreed seven days'

warning, we only had two days. This spread panic in the ranks of the army, already in a state of chronic dissolution. There could scarcely be any question of resistance. The soldiers would not believe that the Germans would advance, after we had declared the state of war at an end. The panic-stricken retreat paralysed even the will of those individual regiments which were ready, in those tragic days and nights, to enlist in the army in tens of thousands. But the necessary organization was lagging far behind. Individual guerrilla detachments, full of enthusiasm, perceived their helplessness at the first serious encounter with the German troops, and this was, of course, followed by a further depression of spirits. The old army, long ago mortally wounded, was falling to pieces, and was only blocking up all the ways and by-ways. The new army, on the other hand, was arising much too slowly amidst the general exhaustion and the terrible dislocation of industry and transport. The only serious obstacle in the path of the German advance was the huge distances.

The peace for which the Soviet government paid so stupendous a price did little to help the internal difficulties of Russia. As soon as the dishonourable treaty of Brest-Litovsk was concluded both the Germans and the Bolshevist government began to violate it. The Germans continued to invade Russia, and the Bolshevists tried to undermine German authority and revolutionize the German prisoners. Although professedly exhausted and tired of fighting, the Russians were very soon revived and energized by their Bolshevist leaders to fight among themselves and to turn Petrograd into something like a mad-house.

The force and vigour which they developed in plundering, shooting, and reducing the bourgeoisie to starvation would have been better employed in helping to finish the campaign against the Central Powers. But they were out for bigger game than that. The people's commissaries set to work to light the flame of civil war at home and foment disorder abroad by every means in their power. They sent propagandists and conspirators into other states, east and west, under all kinds of disguise, and hired the services of others already on the spot.

Russia passed into a state of flux in which Red and White armies surged to and fro, evacuating towns and recapturing them, destroying each other's work, shooting hostages and devastating the country. Hordes of hooligans roamed about thieving. Bands of armed men, drawn from the lowest strata of society under leaders like Grigoriev and Makhno, seized towns and whole

districts and sided with or against the Bolshevists as expediency suggested to them. Deserters from either of the contending forces became incorporated with the troops, going back to the "Reds" or the "Whites," as the case might be, just as it suited their purpose.

In July, 1918, there was a vile atrocity. After his abdication in March, 1915, the tsar and tsaritsa with their family had retired to an estate in the Crimea, but later they were arrested and imprisoned, first at Tsarkoye, then at Tobolsk, and finally at Ekaterinburg in the Urals. There, after a life of hardship and many indignities which they suffered with resignation, the tsar, tsaritsa, the tsarevitch, and other members of the imperial family were ruthlessly assassinated on July 16 by the Bolshevist commissary, Yurovsky. All through the remainder of the year spasmodic civil war was waged in different parts of Russia. Enraged by Bolshevist atrocities, White forces attempted revolt against the Soviet government. Towards the end of 1918 Admiral Kolchak formed an anti-Bolshevist government with headquarters at Omsk, and collected a considerable army. He marched west towards the Urals, and inflicted several defeats on the Bolshevists, but the next year his attempt failed. The Bolshevist government was too firmly established.

No surrender in the Napoleonic wars was so terrible to those immediately concerned, so disastrous in its ulterior consequences, as that of Russia to Germany. There is a certain wasp, described by M. Fabre, that attacks large beetles, paralyses them with an injection of poison from its sting, and then lays them up helpless in its nest to be devoured alive by its young. The beetle is enormously larger than the creature which exploits it, and retains life only that it may be useful to its assassin. Such was the fate henceforth reserved for Russia, or what remained of her. She was to be eaten piecemeal by Germany and the German vassal states, and sucked of her blood, since she had surrendered national independence as a child casts away a toy. Never before in her history had she been compelled to abandon everything worth living for, nor had she had to submit to be sundered into fragments and flung back into the disunion of the Middle Ages.

CHAPTER 3

The March Offensive—(I)

THE Ypres battles of 1917 had left the British armies weakened and fatigued. A period of rest and reorganization was necessary in any case, though there remained no especial inducement to Sir Douglas Haig to continue his offensive in the north. There was, indeed, every sound reason why these bloody and protracted actions, which gained so little of material value, should be broken off. At the beginning of 1918 the French appealed for the relief of their line on a further 28 miles of front, up to the village of Barasis, south of the river Oise. This addition brought the total length of line held by the British armies to 125 miles. When it was taken over, the British divisions had not yet had time to repair their losses.

Already forewarnings had been received of an impending German offensive. Not long after the battle of Cambrai, Ludendorff had published his intention of opening a decisive campaign in the west. For four months the threat was repeated by organs directly or indirectly in the service of the German staff. The iteration, with the prolonged delay that accompanied it, gave rise to some doubt as to the execution of the threat. That was exactly the result that Ludendorff intended to produce. Only a few weeks before the British line was broken Mr. Bonar Law stated that he was sceptical in regard to a grand offensive by the enemy, who, he said, possessed no dangerous superiority in either men or guns.

This official scepticism was not shared by the military authorities on the spot. From the beginning of the year Sir Douglas Haig realized the importance of strengthening his long defensive line and training his divisions in defensive tactics, as well as giving them as much rest as possible. For he knew that the onslaught, whenever and wherever it came, would be of the utmost severity. As the inevitable hour of the attack drew nearer, defensive preparations were hurried forward as urgently as possible. Every infantryman became a worker with pick and spade. Divisions which the year before had been

preserved as shock troops and kept in reserve in the intervals of battles, found, to their unpleasant surprise, that they were now regarded as vast labour companies. Apart from the work of entrenchment and the construction of strong points, an immense amount of labour was expended on the construction of roads, railways and telephonic communications. It was work against time, for time was the deciding factor; yet, when the great blow fell, the preparations to meet it were by no means completed.

The Germans were equally busy in preparing their forces for battle, and between two armies thus preoccupied there was no time or desire for any important conflict. The first three months of 1918 were not marked by any battle beyond the size of a large raid. Raids big and small, made by both sides, occurred incessantly during this time. Sir Douglas Haig thus records the results of these minor operations during the three and a half months preceding the German offensive: "Some 225 raids were attempted by the enemy. Not more than 62 of these were successful in obtaining any identification from our lines, while in 67 cases his raiding parties left prisoners or dead in our own hands. During the same period some 125 raids were carried out by us, 77 of which were successful in obtaining prisoners or identification; while in 31 other cases the enemy's trenches were found to have been evacuated."

About March 18, 1918, most of the enemy divisions that were being rapidly swung forward had the nature of the coming operations explained to them. They were told that three huge armies were to make a general advance in a westerly direction to the estuary of the Somme at Abbeville, where lack of bridges over the widening stretches of water would leave the British army separated from the French. It was explained that, as France would quickly come to terms when left to bear the whole weight of the German forces, it was necessary first to direct the grand blow against the British.

So thoroughly had all preparations been planned that failure was regarded as an impossibility. Yet it was arranged that if the attack should be held up at any point operations should cease there, and the troops moved to another sector. Four groups of forces were arrayed between Arras and La Fère. The most northerly was known as the Mars group, and was detailed to meet and parry any counter-stroke from the direction of Arras, and thereby guard the flank of the first main attacking army.

This army, directed by General Otto von Below, was known as Michael I, and was launched against Croisilles and Bullecourt. Immediately south of Michael I was the army of General von der Marwitz, which was called Michael II, and directed against Bapaume and Péronne. Then about St. Quentin was the Michael III group, consisting of the army of General Oskar von Hutier, into which were fed with extraordinary rapidity most of the reserve divisions of the crown prince of Prussia, who was pretending to menace the Champagne front. The day of attack was known as Michael day. The name was used as a symbol for the German day of revenge, Michael being a Teutonic national figure. The date of Michael day was, of course, a supreme secret, and regimental officers could still only make a guess at it when the great western march began. Some armies began moving at a pace of 12 to 15 miles a night about March 14, and they thought that the British line had been broken, and that they were to exploit the break-through.

On March 18 the secret of the date became a fairly open one. The British staff learnt something, at least, of what was impending, and drew some troops from the Vimy area to strengthen the pivoting point of the line behind Croisilles and St. Leger, while bringing forward some additional artillery for the further strengthening of the 3rd and 5th armies. According to a published German estimate, the attacking gun power still remained four times stronger than the defending artillery. Even the demonstrating Mars group, for example, had 68 batteries and several hundred trench mortars and infantry guns behind every two regiments waiting for attack. This amounted to the proportion of nearly one piece of artillery to every 10 infantrymen in the first phase of the assault. As the fresh divisions of the grand reserve marched through the first attacking forces, and, without relieving them, made a further thrust onward, the general proportion between the artillery and infantry diminished.

Yet the fact remains that the enemy, on his own showing, opened battle with one piece of ordnance to every 10 men in the shock regiments. The British forces at the opening of the attack consisted of eight divisions in the line and seven in reserve in the 3rd army under General Byng. In the 5th army, under General Gough, were 14 infantry and three cavalry divisions. On the morning of March 21, of 29 infantry and three cavalry divisions, 19 infantry divisions were in the line.

March 20 was a day of rain and low-lying clouds, during which the German front was veiled from British flying observers. Once again the weather favoured the Germans. Something was seen, however, about St. Quentin. The British artillery in the neighbourhood bombarded the town with gas-shell, and in the following night many of the British guns were moved to new positions to avoid the hostile counter-battery fire that was sure to come. Also in some of the sectors of the 3rd army, where the battle was expected and the troops in line prepared for it, the ground which they had been holding was suddenly changed, so that the men might escape the worst effects of the preliminary bombardment. Considerable injury was inflicted upon some of General von Hutier's leading forces when the British gas barrage fell on St. Quentin; but as the German commander had some 30 divisions immediately available for action, and still more in reserve, his plan was in no way disarranged by his preliminary losses. They were, indeed, more than compensated by the arrival of the kind of weather required for a mass attack.

After the warm weather of early spring the rain rose from the ground in a dense mist, and, gradually thinning away under the sun, allowed a field of vision of only 50 yards in the later part of the morning of Thursday, March 21, 1918. About an hour and a half before day broke, the German artillery opened a bombardment of great violence and depth. Places some 28 miles behind the firing line were struck by the high-velocity shells, and the barrage of high explosive and gas that fell upon all the British zones of defence was very severe. In the foggy air the gas, as it settled, clung to the ground. Many of the German gunners were firing for the first time on the front and at invisible targets, without aerial or any other control. There was thus a large haphazard element in their work, and it was to make up for this that gas-shell was used, so as to produce a widespread effect. More than 50 miles of the British front, from Monchy to Tergnier, was flooded with poison gas. All known or possible gun positions were attacked with the aim of weakening the defensive shell curtain and counter-battery fire, and all ground likely to be sheltering reserves was smothered. Then, before the German infantry began their movement, high-explosive shell was employed in large quantities.

The British line had been arranged in flexible form, somewhat after the manner of Ludendorff's system along the Hindenburg

line in the previous year. There was an outpost zone, occupied by detached parties. Behind the observing-posts were machine gunners, and behind the machine guns was the first infantry line of any continuity and strength. All this formed what the enemy termed the foreground position. At a certain depth behind it, varying according to the nature of the ground and the scheme of defence, was the battle zone, in which it was intended to fight a pitched battle when the enemy had been compelled to reveal the forces and methods he was employing. In places the British had advanced strong points, screened by protecting devices, and serving both as enfilading machine gun positions against forces working through the outpost line, and as artillery observation centres from which, by sunken telephone cables, groups of guns could be closely directed upon forces striving to reach the battle zone. Southward, in the marshland below St. Quentin, a system of block-houses had been organized after the line had been taken over from the French in January.

It was only possible to delay the enemy in the thinly held advanced positions; but in addition to their direct, confusing effect upon attacking formations, the outpost forces lessened the power of the bombarding artillery by greatly increasing the depth of the ground that had to be searched by fire, and also exposed the hostile infantry to more prolonged countering gun fire during their struggle to reach the zone of critical conflict.

By the fortune of a misty morning and by employing smoke screens the German commander avoided his worst disadvantages in attack. As his men could seldom be seen at more than 50 yards distance in the marshlands of the St. Quentin area, and were often invisible when closer than that, British forward observing officers could only direct most of their guns upon known ways of approach and known or suspected emplacements, while maintaining a defensive barrage of shrapnel over No Man's Land and the enemy's unseen lines.

This was far from being sufficient to shatter so gigantic an offensive movement in its opening stage. In clear weather the German superiority in gun power would probably have been balanced by the British superiority in air power and by the large field of aimed fire afforded to the defending machine-gunners and riflemen. In misty weather the resisting strength of the fortified lines was much diminished, while the driving force of attacking massed infantry was considerably augmented.

The enemy advanced in masses, so as to get considerable bodies quickly through the shrapnel curtain, and rapidly overwhelm the advanced guards and artillery observers in the foreground positions. He did not, however, thrust with equal force all along the 50 mile front, but made separate attempts to cut between certain sectors and envelop parts of the line he did not directly assault.

In the north he was not at first successful, but in the south, above and below St. Quentin, the tremendous weight with which the Germans maintained their assaults resulted in the greatest success they had obtained in parallel battle since the breaking of the Russian line at Gorlice in the spring of 1915. From all points of view the southern battle was the more important. In it the enemy won at Vermand, a few miles from St. Quentin, the fine straight highway running to Amiens towards his grand goal of Abbeville. He also obtained four or five other roads leading in the same direction. Moreover, he broke the British and French forces asunder at their important point of junction; and while pursuing his principal plan of advancing towards the Somme estuary at Abbeville he was immediately able to improvise a secondary offensive in the direction of Paris.

At the opening of the action the extremity of the British line rested by the Oise river at Tergnier, close to the hill town of La Fère, which remained in the enemy's possession in March, 1917, owing to his device of inundating the marshy country around. Some of the seventeenth century fortifications of La Fère were, however, won by the French and handed over to the British. Chief among them were Vendeuil fort, north of the town, Liez fort and Garde fort, north-westward; and the new works constructed by the railway junction of Tergnier, about four miles west of La Fère. Though useless as artillery positions, the old La Fère forts were admirable as machine gun and observation posts. They became, in British hands, the foundations of a block-house system that extended through the marshlands, and, with simpler works, including some that had been first organized by the enemy, formed a chain of redoubts that covered the approaches from St. Quentin.

London troops held the southernmost advanced work, including the fort known as the Keep, opposite La Fère, and the Liez redoubt, on a rise of ground. A company of the Buffs garrisoned the old fortress of Vendeuil, constructed by Vauban,

Imperial War Museum

NIGHT SCENE NEAR YPRES. In this photograph a soldier on patrol is seen on the desolated battlefield at Wieltje, east of Ypres, in January, 1918. The ground before Ypres, from Dixmude in the north to Messines ridge in the south, was the scene of constant fighting throughout the war. Local attacks continually changed the Allied line, both the combatants attempting to create and destroy salients

Imperial War Museum

MARSHAL FOCH. Ferdinand Foch was France's greatest soldier in the war. He won fame at the 1st battle of the Marne in September, 1914. Throughout the subsequent years he was a tower of strength to the Allies in the west, and when in the great crisis of March, 1918, the appointment of a generalissimo became imperative, no other name than Foch's was mentioned. With unity of command assured every later German offensive was defeated and under Foch's supreme direction the Allies marched to final victory. Foch, who became Marshal of France on August 6, 1918, died on March 20, 1929.

Imperial War Museum

GUARDS BRIGADE FOR THE DEFENCE OF ARRAS. Ludendorff's whole scheme of attack in 1918 is known as the 2nd battle of the Somme, or as the battle of St. Quentin, from the sector where the first smashing blow was delivered on March 21. But the Arras-Vimy area was also involved in the assault, and here the defence held firm, largely owing to the heroism of the Guards in the third defence system before Arras. The 2nd brigade is here seen moving up the Arras road in motor lorries on March 26.

GUNNERS TO THE RESCUE. The illustration shows gas-masked British gunners firing point-blank into advancing masses of the enemy during the German offensive of March, 1918. Although the Germans broke the line of the British 5th army and gained large areas from the Allies, by March 30 their furious effort died down and the new Allied line held firm.

the architect of the Verdun works. Above the Buffs a Scottish force held the line near Urvillers, and men of the Ulster division manned the Racecourse redoubt. Farther north was a hill that had been taken by the Manchesters in the battle along the Hindenburg line, and called in their honour Manchester hill. Transformed into a work dominating the western approach from St. Quentin, it was again occupied by Manchester men. Still farther north was the Enghien redoubt, a strong point in the sector occupied by the 61st division.

Upon the chain of redoubts the weight of the German attack fell. When the enemy came forward in the morning—at times varying from seven o'clock to 10 minutes to 10, according to the local condition of the mist, the state of the ground, and other circumstances—he was faced by the line of works, arranged several hundred yards apart, belted with wire entanglements and each garrisoned by a company of infantry whose machine guns were arranged to sweep all the ground.

By the time the bombardment lifted from the British foreground to the battle position there were some gaps made in the chain of earthworks, and the German infantry stormed out in close waves to find the gaps. Some of their forward troops cut the wire that had not been broken by the bombardment, and their machine gunners dashed forward and began to send out a barrage of bullets to keep down the British fire while the masses of the shock divisions rushed forward. In two main concentrations they endeavoured to break from Moy and La Fère, encircle everything in the nine-mile space between, and then block the path of retreat of the Scottish force north of Moy. The British post at Travecy, between La Fère and Vendeuil, was surrounded early in the struggle, when the fog was thickest, and communications with it became very difficult. But the Londoners in the Keep at La Fère made an heroic resistance.

Meanwhile, Germans tried to strike upon their rear by forcing a passage southward, where the waterway swerved by the marshes of La Frette round the British flank. Stealing out under cover of the bombardment and foggy darkness, enemy sappers threw four pontoon bridges across the stream. Over the bridges rushed a German brigade in an attempt to break by surprise into the English rear, while another force was trying to work round the northern side past Liez fort.

But the bridges had been seen and a trap prepared. From the

high ground above the marsh British field guns swept the La Frette position with shell, while the London infantry drove the Germans back to the river. Hutier, however, had many brigades to spare. He sent forward more divisions, and after severe loss his masses began to work around the Keep. Having delayed for many critical hours the enemy's most menacing thrust at the junction point of the Allied armies, the men of the London Regiment withdrew hastily from the La Fère Keep. They fell back on Tergnier and the Crozat canal line. Northward the West Kents stood firm against the Germans, who continually attacked all the morning with increasing forces. The Buffs in Vendeuil also put up a strong resistance.

Early in the day the situation between Moy and St. Quentin had become extremely grave. Here it was that Hutier made the most strenuous of his efforts to break swiftly and completely through the British line. Fierce as had been his attacks over the Oise marshes by La Fère, they seemed directed rather to attracting reserves, and, if possible, giving the neighbouring French army urgent work to do in helping to save the Allied junction than to making a lightning break-through—that is to say, they generally covered the supreme design for striking a shattering blow from St. Quentin in the direction of the roads leading towards Abbeville, which was the distant goal, and the main railway communication between the British and French armies, which was the immediate objective.

From around St. Quentin the German commander struck with shattering force, and then sent in fresh divisions to pass between the successful troops and carry the attack clean through the battle zone. The British line about the city was held by Scotsmen along the Oise towards Itancourt. Thence the Ulster division occupied the ground running from the edge of Neuville St. Amand to Gauchy by the Somme canal, and the fortified knoll, Epine de Dallon, commanding the Somme marshes. On the left of the Ulstermen was a British division. The outpost positions on Manchester hill, Epine de Dallon, St. Quentin racecourse and other high places seemed to make the line as impregnable as was Vimy ridge. They commanded all the open country over which the Germans had to work; and, had Ludendorff been forced to open battle on a clear day, his massed divisions would have been annihilated as they moved out of the city. In the fog, however, they effected a complete surprise.

A HASTY RETIREMENT

It seems to have been about 10 o'clock in the morning that most of the first attacking divisions in St. Quentin moved forward behind their skirmishing groups, after a bombardment of six and a half hours. Even at this late hour in the day, when visibility had increased to 400 yards around Arras, the fog remained so dense between the Oise and Somme that the men could not see more than 50 yards from the trenches. Many of the block-houses were surrounded before the garrisoning companies knew they were being attacked, and the main British forces holding the battle positions do not appear to have known or to have been warned that the battle had been opened.

The enemy troops, therefore, escaped much of the intense barrage of shells, machine gun bullets and rifle fire, for the production of which all the defensive works had been organized. On the south-eastern flank a wedge was driven between the Ulstermen and the Scotsmen and the Ulstermen's battle position between Essigny and Contescourt was partly turned.

At half-past ten a message was received from the Racecourse redoubt that strong attacks were proceeding there, and although communications were cut off immediately afterwards, the Ulster garrison continued to hold out until the evening. In the meantime, the Irish division endeavoured to hold on to its main battle position against overwhelming forces of Germans working down to Grand Seraucourt, more than five miles behind the Gauchy front. All hope of saving the line was lost at two o'clock, when the Germans advanced from Essigny village to the railway station, and towards the canalized Somme.

Above Essigny a hasty retirement had to be carried out in the morning of March 21. At 20 minutes past 11 Grugies valley was lost, in spite of the fact that the Ulster trenches there were bristling with machine guns and covered by reinforced groups of batteries, which had been carefully registered. Before noon a considerable number of the guns at Contescourt had to be abandoned, and the gunners turned to cut their way back.

In the afternoon, clerks, servants and signallers were armed, together with any available labouring forces, so as to provide men for the continual rearguard actions in the long retreat. Facing the enemy with a weak line that yet was never broken, the Ulster division fought till nightfall, and then crossed the canalized Somme by Artemps and blew up the bridges behind them.

The British division on the left of the Ulstermen had much the same experiences in the same thick weather. At 10 o'clock their reconnaissance parties could not find the enemy in the fog; at half-past ten most of their own outpost positions were in course of being surrounded; at 12 o'clock their battle zone in front of Etreillers was penetrated.

Throughout the first day attacks and counter-attacks continued around the battle zone. During the afternoon and evening the enemy achieved his greatest successes on the right of the line south of St. Quentin. At four p.m. he was in Fargnier, from which he advanced to the Crozat canal and entered Quessy. The 18th division, reinforced by the 2nd cavalry division, held out in the neighbourhood of Ly Fontaine well into the evening, though many of their strong points were surrounded. The same story of scattered units left defending hopeless positions and thus delaying the enemy's general advance came from other quarters of the battlefield. Though towards the close of the day the British line had been forced back in the neighbourhood of Benay and the Somme canal, parties were still defending positions east and north-east of Essigny.

More successful in a general way were the efforts at resistance on other parts of the front. The 30th division about Roupy and Savy repulsed with heavy losses the attack upon their line which was supported by tanks. The battle positions were still held on the rest of the 5th army front, and the 3rd army in the Flesquières salient kept its line practically intact. Round Demicourt and Doignies and north of Beaumetz-lez-Cambrai heavy fighting took place, but the enemy made little progress.

During the afternoon Lagnicourt was captured and the enemy had reached the outskirts of St. Leger. Sir Douglas Haig wrote:

> At the end of the first day, therefore, the enemy had made very considerable progress, but he was still firmly held in the battle zone in which it had been anticipated that the real struggle would take place. Nowhere had he effected that immediate break-through for which his troops had been training for many weeks, and such progress as he had made had been bought at a cost which had already greatly reduced his chances of carrying out his ultimate purpose.

During the night, however, withdrawals on a large scale were decided upon. The divisions of the 3rd corps were ordered by Sir Hubert Gough to take up a position behind the Crozat canal, and the 36th Ulster division was withdrawn to a line on the

Somme canal. The 5th corps and the 9th division carried out a retirement to a line from Highland ridge and thence westward along the Hindenburg line to Havrincourt and Hermes. Bridges over the canals were destroyed as far as possible, and Sir Douglas Haig recorded one instance of the exceptional bravery of an officer who personally lit the instantaneous fuse after the electric connexion for firing it had failed. By extraordinary good fortune, he adds, this officer was not killed. At this stage of the battle the British commander-in-chief made arrangements for bringing up his available reserves from other parts of the front, and also for certain measures of relief from the French army.

The next morning broke with mist still lying heavily on the ground. Renewed attacks by the enemy were made in great force. He suffered very heavy losses, but the overwhelming superiority of his forces made it possible for him to make continued and extensive progress.

The enemy commander endeavoured to make another breakthrough at the canal town of Jussy, between Ham and Tergnier. By remarkable rapidity and precision of movement his infantry converged, in the misty morning of Friday, March 22, upon Jussy, and occupied the town. But by a counter-attack a British brigade recovered Jussy. The Germans then struck again, more to the east, and won a footing across the canal between Jussy and Tergnier. After very heavy fighting, in which the 58th division was principally engaged, the village of Tergnier fell to the Germans in the evening. They also crossed the canal at La Montagne, but were driven back by the 18th and 2nd cavalry divisions. In the centre of the line, during an attack in the early morning, they carried the villages of St. Emilie and Hervilly. A partial recovery was made in this sector, and the 66th division was able temporarily to withstand the enemy's advance.

South and north, however, this advance was continued. At 10 a.m. La Verguier fell, followed by the abandonment of Villers-Faucon. The line about Roisel was then evacuated and the British troops retired to positions between Bernes and Boucly. The 21st division, which had done most excellent work throughout the battle, since its opening on the morning before, was also forced to retire and in the north, towards the evening, the 9th division fell back on a line Nurlu-Equancourt.

Towards the evening heavy attacks were made against the Flesquières salient and were beaten off, as were also those farther

north between Hermies and Beaumetz-lez-Cambrai, which had occurred earlier in the day; but these temporary advantages only delayed more general retirements at Vraucourt, along the line of the Croisilles-Henin-sur-Cojeul road and at St. Leger. Troops east of Holnon Wood fell back, and so hardly pressed was the centre of General Gough's army that at 11 o'clock on the evening of March 22 a further retirement was ordered on to the bridge-head positions north of the Somme, a withdrawal constantly menaced by enemy action. Flesquières salient was also evacuated, the divisions retiring to a line Equancourt-Metz-en-Couture. Here, near Equancourt, the 3rd army established touch with the 5th army. On the left the British troops were retired to positions south of the Scarpe between Henin-sur-Cojeul and Fampoux. Throughout the night fighting took place.

The retirement was continued the next day. The line of the Crozat canal was reported to have been forced, the Germans were known to have formidable reinforcements close at hand, and Sir Hubert Gough, unable to rely on any support for his already tired troops, decided not to risk giving further battle east of the Somme. The main Péronne bridge-head position was abandoned and the 19th corps was ordered to withdraw to the west bank of the Somme, and the 8th corps to conform to this movement. The Crozat canal was crossed at several points during the morning, and rearguard actions were fought round Failleoul, Noureuil and Cugny. In the meantime, however, Ham had been lost. The Germans attacked in two forces, one advancing along the two roads through Roupy and Tugny, so as to turn the fortress town from the north, while the other thrust along the St. Simon road, endeavouring to outflank alike the troops defending Ham and the forces holding the hill country above Chauny. Heavy fighting took place round Ollezy, Aubigny and Brouchy, all of which villages were relinquished in the evening.

During the day the Germans fought their way into Péronne, and followed the British back to the Somme. As the British retreated, bridges were as far as possible destroyed, but in a good many cases the German bombardment cut the wires or blew up the charges held ready, and thus the destruction was incomplete. During this day detachments of French troops began to arrive on the battle front; the French infantry, however, had only 200 rounds of ammunition per man and no artillery. Sir Douglas Haig arranged with General Pétain that the French should take

over the front south of Péronne. Their intervention only just balanced the fresh reserves which Ludendorff threw in, and could not stabilize the line. General Gough's choice was still between annihilation or retirement, and his losses had already been extremely heavy. The situation at the junction of his army with the 3rd army was very critical. In the course of retirement units as large as brigades and divisions had lost touch with each other.

On March 24 the Germans continued their advance with notable success. They reached Bus, Lechelle, Le Mesnil-en-Arrouaise and entered Saillysel, Rancourt and Cléry. North of Bertincourt the right of the 3rd army retired to conform with the southern movement. The retirements were no mere blind retreats. They were accompanied by many gallant rearguard actions which inflicted heavy losses on the advancing enemy. By this time the original divisions that had held the southernmost line on March 21 were utterly outworn. Brigades had shrunk to the strength of battalions, and men were so dazed by fatigue that many were barely able to move or understand orders.

Near Marrières Wood, north of Cléry, part of the 9th division of the South African brigade, which had been isolated, maintained a most stubborn resistance until they were without ammunition and had only 100 unwounded survivors. General Gough has since drawn attention to a German regimental history in which this action is thus described : " During the afternoon the 357th and 237th reserve regiments captured Marrières Wood in spite of the heroic and desperate defence of the almost completely destroyed South African brigade."

Reaching the Somme on this date, the Germans made numerous attempts, between Péronne and Nesle, to force a series of passages between Nesle and Cléry-sur-Somme. They were well prepared, and everything had been provided for a swift crossing. Heavy artillery in very considerable strength was hauled forward by tanks and tractors so as to assist the field guns in rapidly destroying all defences on the opposite bank of the stream. Fleets of rafts were brought up, together with the sections of ordinary pontoon bridges. Actually the abnormally dry weather prevented the river from being a serious obstacle. On the morning of March 24 the river was crossed at Pargny, where the Germans consolidated their position on the west bank and at St. Christ and Bethencourt, where they were thrown back by troops of the 8th and 20th divisions.

In the narrows over which the Germans continually tried to force a passage and win bridge-heads they came under heavy gun fire which shot the pontoons to pieces and turned the rafts into wreckage, while British machine gunners and riflemen put the Germans out of action by more detailed operations. Ludendorff claimed in his communiqué that his men had crossed the Somme. They did so at Pargny, but it was not until the next morning that they succeeded in crossing, after hard fighting by St. Christ and Falvey; and, after suffering heavy losses at every rush forward, attacked Morchain, Mesnil and Rouy.

Further rearguard actions were fought on March 24 between the Somme and the Oise, where the 20th and 36th divisions fell back from Eaucourt and Cugny on Villeselve and Guiscard. In this area valuable support was given to the retiring infantry by cavalry charges. Afforded only limited help by the French, British troops were forced back east and north of Chauny to the ridge above Crepigny on a line Noyon-Guiscard-Libermont. On this day Pétain issued as a directive order to his forces above all to maintain "the solid connexion of the French armies, and then, if possible, to preserve contact with the British forces," which pointed to an intention to retreat towards Paris and Reims, diverging from the British line of retreat.

Writing of this day (March 24), General Gough in his history of "The Fifth Army," says: "Our task was still unfinished, and the question was becoming more poignant: how much longer would the officers and men be able to stand the tremendous strain?" The British had received the reinforcement of three French divisions which had taken over the front of the 3rd corps, but at the same time the Germans had received even greater reinforcements. "The odds against us," says the former 5th army commander, "were heavier than the first day, taking into consideration the fatigue of our men and the severe losses they had suffered." As for these losses, General Gough establishes the fact that: "casualties had now become so heavy that in some cases two or three brigades were organized into one and the battalions were concentrated into companies."

On the night of March 24-25 the German commanders took advantage of the clear night sky to deliver strong attacks, but did not meet with any success. As daylight broke on March 25, attacks on Favreuil and Ervilliers were beaten off and the 42nd division made some advance. By mid-day, however, heavy

enemy pressure drove back the right of the 4th corps to Grévilliers and Bihucourt. Ervilliers remained in British hands until the evening, and it is recorded that hereabouts the 1/10th battalion Manchester Regiment (42nd division) repulsed no fewer than eight German attacks. The same dogged resistance which marked the stages of this unhappy retreat was reported from many other sectors of the battlefield. Though they had lost touch with their left flank, British forces on the north bank of the Somme, between Ham and Trônes Wood, repulsed all enemy attacks, and took prisoners.

The general movement of retreat, however, continued. Between Montauban and Grévilliers divisions were obliged to fall back towards the Ancre ; but not without fierce fighting, in which the 63rd division particularly distinguished itself. The gap between the 5th and 4th corps became widened. Courcelette fell during the afternoon, and in the evening the 4th corps was obliged to retire to the line Bucquoy-Ablainzeville, while other divisions of the 3rd army fell back on positions between Bray-sur-Somme-Albert and farther to the west bank of the Ancre.

Reinforcements began to arrive at this time, and Sir Douglas Haig entertained the hope that he might be able to hold the line of the Ancre. On this day, too, the French took over the battle front south of the Somme, but scarcely yet in sufficient strength to relieve the acute anxiety which existed in this sector. In the early morning of March 25 the Germans captured Guiscard, attacked the Allied positions north-east of Noyon, and later in the day entered that town. Meanwhile, on the 5th army front, they captured Nesle, crossed the Libermont canal, and to the north pushed forward towards Chaulnes. These moves necessitated a withdrawal to the line Hattencourt-Estrées-Frise, a retirement which was covered by a counter-attack of the 39th division. In the early morning of March 26 the 20th division withdrew through Roye, protected by its own 61st brigade.

Fresh enemy divisions were being added to all attacking troops still fit for action, and as the northern bank of the Somme had been gained by the Germans, who were pressing into Albert and Sailly-le-Sec, it was clear that the final drive at Amiens would need a fresh defending force to withstand it. In the night of March 26 the Germans bombed Amiens. After one more day's fighting they hoped that their guns would be able to range upon the city. But before dawn the next

THE MARCH OFFENSIVE. Map showing ground gained by the Germans in their great offensive on the Somme, March–April, 1918. For clearness the successive advances, with dates, are indicated by broken lines.

morning a fresh British force had been raised to meet the German stroke. Its appearance would have excited the derision of Marwitz and Hutier. It consisted of some 2,000 details commanded by Brigadier General Sandeman Carey, who obtained from an infantry training school some regimental officers and led his force, in the afternoon of March 27, down to the line south-eastward from Villers Bretonneux. The new

recruits dug themselves in well, this being work at which many of them were expert. Then they were asked to hold their front at all costs for two and a half days, to the night of March 29, when the French were expected to arrive in relief.

The mobilization of this force and the conspicuous part which it played in subsequent actions make a more detailed description of its inception necessary. General Gough thus describes it:

> It was during this Monday afternoon (March 25) that we organized, under the staff of the army, a body which later attained some notoriety as "Carey's force." This force consisted of everyone we could collect, and included electrical and mechanical engineers—surveyors—500 men of the U.S. engineers—tunnellers and miners—Army, Corps and Sniping schools—signallers. The Army Signal School supplied its communications, nine grooms acted as mounted orderlies, and it was equipped with some wagons and lorries for transport work.

Although Carey's force is the best known of these emergency units, it was by no means the only one. The same process of massing together by all available men was carried out elsewhere, and there is no doubt that this prompt action in pressing every available rifle into service had a real bearing on the ultimate issue of the battle.

The two days, March 26 and 27, were marked by a still further series of retirements. On the morning of March 26 the Germans attacked westward and south-westward from Nesle, about Hattencourt and at Herbécourt. Before these attacks the British line broke in a westerly direction, though not without a series of strenuous counter-attacks. An unfortunate blow to the Allies was the retirement of the French beyond Roye, a withdrawal which left a serious gap between the Allied armies. This was filled by tired divisions (30th and 36th), which only the day before had been taken out for a rest. They held the position until the afternoon of March 27. Referring to the actions of March 26, Sir Douglas Haig wrote in his dispatch:

> On this part of the battle front a very gallant feat of arms was performed on this day by a detachment of about 100 officers and men of the 61st brigade, 20th division, at Le Quesnoy. The detachment was detailed to cover the withdrawal of their division, and under the command of their brigade major, Captain E. P. Combe, M.C., successfully held the enemy at bay from early morning until six p.m., when the 11 survivors withdrew under orders, having accomplished their task.

The general British line at the end of the day in this sector ran from Guerbigny-Rouvroy en Santerre to Proyart, and touch had been established with the French.

North of the Somme the gap between Hébuterne and Bucquoy was filled, and the general line maintained. Farther south, on the afternoon of March 26, a retirement was made under a misapprehension from the Bray-sur-Somme-Albert line to the line of the Ancre. This endangered the left flank of the British 5th army, leaving the right of the 3rd army about Sailly-le-Sec. The Germans entered Albert on the night of March 26-27.

The chief action of March 27 is known as the battle of Rosières. This took place south of the Somme on the line held by the British 5th army and the French. The importance of holding this line was felt more deeply as its defence would have prevented the intensive bombardment of Amiens. But the German attacks were made in great force. At Proyart, where bodies of German troops were established in the rear of the British positions, a retirement was necessary. The Germans also took Framerville and Morcourt. Counter-attacks failed to save Davenscourt and Montdidier, and during the night the Germans entered Bayonvillers and Warfusée-Abancourt, important points on the main Amiens road. From Marcelcave to the Somme the line was held by Carey's force, which towards evening was forced to withdraw under heavy artillery fire.

During the night of March 27-28 the British forces had fallen back to the Amiens defence line from Mezières to Ignaucourt and Hamel. The general situation was gloomy in the extreme. The troops were exhausted by the continuous fighting, and by all the dismal circumstances which must accompany a prolonged retreat. They were also terribly weakened in strength.

Two appointments were made at this time which must be recorded. The first was the command given to General Sir H. S. Rawlinson of the British forces south of the Somme; the second, of far greater importance, was the decision of the French and British governments to place General Foch in supreme control of the forces in France and Belgium. "The appointment of a generalissimo," Sir Douglas Haig wrote, "was made imperative by the immediate danger of the separation of the French and British armies."

CHAPTER 4

The March Offensive—(II)

It was Lord Milner who, in an interview with M. Clemenceau, arranged for the British and French governments to appoint General Foch to the position of commander-in-chief of the Franco-British forces on the western front. By cabling to President Wilson permission was obtained for United States troops to act as a general reserve force, and be brigaded as occasion required with French and British divisions. The Belgian government agreed readily to the appointment of General Foch as Allied commander-in-chief, and the Italian government also accepted for its armies the arrangement made by Lord Milner and M. Clemenceau. The power given to Foch was larger than that exercised by Ludendorff. In the first place the French general had no rival standing immediately behind him, as Hindenburg stood behind Ludendorff.

In the second place Foch was able, in collaboration with Diaz, to exercise direct control over the Allied forces in Italy and, at need, to place Italian troops in the battle line in France. Ludendorff, on the other hand, could exercise only indirect political pressure upon the Austro-Hungarian high command, which was reluctant to open another grand offensive in Italy until it was convinced that the strength of the western Powers was rapidly declining. Ludendorff was not commander-in-chief in Italy as well as in France and Flanders. The work done by his lieutenant, Otto von Below, now transferred to the western front, had made the Austrian command feel more independent. Grudgingly it allowed some artillery to be sent to the western front; but this measure of assistance had far less strategic significance on the enemy's side than the appointment of General Foch to supreme command on the Allied side.

The French commander, however, lacked the material power of his opponent. In personal genius he was superior to Ludendorff, and he had an impressive record of defensive and offensive victories, from the battle of Morhange in August, 1914, where he

saved the French front with a single army corps, to the battle of the Piave in the autumn of 1917, where he co-ordinated the Italian, French and British armies of defence. He had broken the German centre in the battle of the Marne, and saved Ypres in November, 1914, when Sir John French's forces were exhausted. He had carried the approaches to Vimy ridge in 1915, and co-ordinated the French and British forces of attack on the Somme in 1916.

Before tracing the immediate effects of this newly established unity of command, it is necessary to carry the narrative a stage further as it concerns the purely British sectors of the front. March 28 was a decisive day in the progress of this prolonged battle with its many heart-breaking retirements and bitter counter-attacks. At the end of it Sir Douglas Haig was able to discern "a break in the clouds" and a weakening of the first stage of the German offensive.

The incidents of the day began in the early morning when very strong attacks were made north of the Somme from Puisieux to north-east of Arras. By this renewed offensive in the valley of the Scarpe, which involved a serious lengthening of the battle line, part of the 1st army (13th corps) was engaged in fierce fighting. The enemy's objective was the line Vimy-Bailleul-St. Laurent-Blangy with Vimy ridge as a final goal. Adopting the methods which they had found so successful on March 21, the Germans were this day denied the singular advantage which favoured them in the earlier attack. There was no mist lying on the ground, and their advancing columns were completely exposed to the fire of the British infantry, machine gunners and artillery. As a result they were unable at the first assault to do more than penetrate the British outpost line at points where they had already broken it by bombardment. Despite further heavy attacks made in the afternoon they made no progress at any point, though they sacrificed much life in attempting to break through. In the evening the British battle positions along the Scarpe were intact and the Germans had failed in their immediate purpose.

Aroused to the extreme danger of the position around Amiens, General Foch began to move the French 1st army, under General Debeney, into the gap on the left of the French 3rd army, under General Humbert, while the British 4th army was moving southwards to range alongside the French 1st army. General Fayolle,

who had been French army group commander under General Foch in the Somme battle of 1916, where he had worked with General Rawlinson, was made strategic commander of the Amiens front during the period when General Carey's brigade of odd men was the only force between the enemy and his grand goal.

But two days had been lost before the Allied mass of manœuvre began to come into action. On March 27 the first of the new French forces was brought up in motor-lorries to the village of Rollot, between Lassigny and Montdidier. But this fresh force could not spread immediately in strength north-westward, towards the country through which the last of the gallant remnants of the Ulster division were retreating from Guerbigny. The situation was still very dangerous about Lassigny, and infantry reinforcements had at once to be sent to the dismounted cavalrymen, who were defending Canny and Conchy and the low-lying land through which the enemy was trying to thrust in the design to turn the Thiescourt heights.

The French and British cavalry, mounted and dismounted, had to fight fiercely while the fresh infantry forces were gathering to strengthen the lengthening line. Above Rollot the cavalry had to carry out an extraordinary series of actions in order to win time for General Foch's reserves to arrive. Moreover, the British and Canadian troopers, who had counter-attacked in front of Noyon, after rearguard fighting all the way back from Ham and St. Simon, had again to fill the gap in front of Amiens and counter-attack Marwitz's forces after checking Hutier's masses. French infantry on the right were driven in above Rollot, and the French cavalry were attacked through the gap. Covered by some British gunners, who had fought continually from St. Quentin, the Frenchmen made a fighting retreat through Montdidier, and in the night of March 27 the small force began to dig itself in upon the hill of Mesnil St. Georges, between the Avre river and the Calais-Paris railway line below Amiens.

It seemed that the struggle for Amiens was practically ended. Before day broke on March 28 the conquering German forces in Montdidier spread across the Avre and, on a battle front of six miles, climbed the Mesnil hill. The French cavalry and infantry, with their British gunners, were driven back for a mile and a quarter, and the apparently irresistible enemy had but to make another advance of six miles in order to sever railway communications between the British and the French armies.

The city of Amiens in itself was not the first objective of the enemy. To him Amiens was merely a railway station on the line he wished to reach, and by striking at the Calais-Paris railway between Amiens and St. Just he attained his first decisive objective by the easiest path. Standing immediately above the weary Frenchmen was the still weaker collection of armed non-combatants commanded by Brigadier General Carey, which was persistently attacked for several days, but such tremendous numbers of Germans were not directed against it as were poured upon the French line through and around Montdidier.

There was a good reason, however, for the southward direction of the German attack. North of Montdidier was the widened marshy bed of the Avre, complicated by the long swamp of the Luce stream. Above these two natural moats were the broad marshlands of the Somme river, the Ancre stream and the Hallue brook. Between this great system of streams and morasses rose the large hill of Villers-Bretonneux, behind which was another important height with wooded cover, forming together a grand, natural moated fortress protecting the front of Amiens. At Montdidier, on the other hand, there was only the Doms brook, a small tributary of the Avre. Except for the cover given by a railway line and some patches of brown woodland, there was no obstacle to the rapid deployment of hundreds of thousands of men. What small obstacles existed were overcome before daybreak on March 28; but as the Germans were almost within reach of the vital French railway line, Ludendorff suspended the struggle for Amiens. At the same time Foch informed M. Clemenceau that the worst was over, and that one of the important defensive battles in the history of the world was won.

While remnants of the original British forces, with a fresh French cavalry division and some outworn French infantry, were fighting for two days over the 10 miles of country between Roye and Montdidier, the southern part of the Calais-Paris railway had been working at full pressure. In conjunction with fleets of motor-lorries, marching columns and supply carts, it had become General Foch's instrument for outmanœuvring the enemy commander. The French army was getting into position. It threw out reinforcements by motor-lorry at Rollot on March 27, and in the morning of March 28, when the last Franco-British rear-guards were falling back from the hill of Mesnil St. Georges, they met a fresh infantry division of General Debeney's army, and,

joining with it, made a counter-attack that decided the fate of the railway communications of the Allies. In extent the ground won was not important. It was about a mile and a quarter in depth and six miles long; but as it included the upland of Mesnil St. Georges, it left the enemy in the valley of the Doms brook, with no observation over the trunk railway line.

Ludendorff allowed Marwitz and Hutier two days to re-form their original forces, which were strengthened by the last picked forces from the enemy general reserve—the Prussian Guard. Then, on Saturday, March 30, the grand battle was renewed on a front of some 50 miles, from the Somme near Villers-Bretonneux to the Oise river below Noyon. North of the Somme a strong subsidiary holding attack was delivered between Albert and Arras, making the battle front with all its windings some 80 miles long. There were two main thrusts. One was directed against the Thiescourt plateau between Noyon and Lassigny, the other against the Amiens railway line near Montdidier. Thiescourt plateau was by far the strongest position on the new French line, for the reasons already given, and the assault upon it was, like General von Below's attack upon General Horne and the British 1st army, a military mistake. Hutier's design was evident. He intended to prevent the new Allied commander-in-chief from cooperating with the British high command by directly menacing Paris. The idea of this stroke seems to have been based upon misinformation regarding differences in views between the French and British commands.

General Foch had left only a small garrison on the Thiescourt hills. Against a French regiment holding Plémont hill, overlooking Lassigny, the German commander launched two divisions directly, while swinging another strong force in a southwesterly encircling movement through the village of Plessis and the brook-threaded hollow running to Plessier Château. While the defending machine guns were meeting the frontal wave of attack, the enveloping enemy force succeeded in working across a marsh into the grounds of the château. Then from this flanking position the enemy masses manœuvred against the French Colonial troops at Canny on the left and against the wooded crest of Plémont hill on the right. Plémont was not captured. A French Colonial regiment at Canny, although it had only a few companies available for counter-attack, began to drive forward as soon as the enemy's strength was felt to be weakening.

These Colonial troops advanced upon Plessier Château from the north, and met in the village a force of chasseurs who were making an encircling movement on the other side. The Germans had mounted machine guns upon the walls of the park, but the machine guns were facing the wrong way. The linking French forces broke in on the rear of the apparently successful enemy, and while their artillery barraged all the approaches from Lassigny they killed or captured every German engaged in the early encircling movement. Then on Plémont hill another comparatively small counter-attacking force was organized by half-past four in the afternoon. It broke up the German attack completely, and ended in a hot pursuit down the hill and across the plain to Lassigny.

At Mont Renaud yet another small French force broke some ten attacks in a struggle lasting far longer than the general battle of the rest of the fortressed hill country. The reason for this was that through some mistake on the part of a subordinate, Ludendorff, at the end of the battle, claimed in his official report to have conquered the small outlying knoll from which Noyon town was directly dominated. He ordered his errant local commander to make good his false claim to victory. But General Humbert then took measures to prevent any German force from taking the hill. He ranged his guns on every yard of approach, and devised rapid means of communication between observation officers on the hillside and all batteries within bearing distance. The local German commander brought his own field guns forward to a distance of less than one mile from the rise, and under heavy shell fire continued his attack for nearly a fortnight. But the garrison of Mont Renaud was not to be shaken. It required a great German offensive, that took months to prepare, to make good the enemy's claim to victory.

The first great German attack on the Thiescourt plateau failed as completely as the attack on Vimy ridge. The defending artillery in each case had dominating observation and favourable weather, with remarkable visibility. Little more than a screen of infantry was required to check the enemy assault after it had come under the fire of the guns of the defence. There was, however, much less artillery power behind the Franco-British forces in the second and more important sector at which Ludendorff thrust with all available strength. While endeavouring vainly to distract General Foch in the south, the enemy

commander-in-chief belatedly returned in the west to his original objective, and struck again from Montdidier and Rosières in the direction of the Amiens sector of the Calais-Paris railway. There were still only three French divisions arrayed upon the hills between Moreuil and Monchel, on either side the road leading to the railway. Behind this small French force was a small British reserve, formed of the British and Canadian troopers who had acted as a rearguard in the retirement north of Ham, protected General Pelle's forces, and saved the Thiescourt plateau for the French 3rd army. The tired British cavalry division had been moving upward as a mobile reserve to all the new French line, and when about to rest, in the night of March 29, received orders to ride northward with all speed and help cover the approaches to Amiens. The squadrons reached St. Boves at midnight, and, in the early morning of March 30, they were widely scattered in rearguard fighting from Marcelcave to Moreuil.

Marwitz and Hutier skilfully combined their main forces for a decisive drive into Amiens. There were 15 German divisions deployed against the three French divisions for the turning movement across the Doms brook, and another overwhelming number of divisions of assault was launched against the scanty British forces by the Somme river and Luce stream. All through Saturday, March 30, the French and British troops struggled to maintain the natural defences of Amiens against the continuous attacks of the enemy. While the German commander repeatedly withdrew and renewed his units, the small defending forces—most of whom had already been fighting for days and nights without relief—could only snatch sleep between the periods of attack.

On the crest of Mesnil St. Georges one infantry battalion, with some platoons from a neighbouring unit, shattered five successive attacks made by an entire German division. North of Mesnil there was a continuous battle by the Doms valley and the slopes of the western hills. While maintaining a strong pressure on this part of the Allied line, the Germans made successive attempts to get a short cut to the trunk railway by advancing in the angle between the Luce and Avre rivers between Moreuil and Hangard. At the junction of the two small streams, by Hailles village, there was barely more than a mile and a half of ground to cover before reaching the railway. Indeed, an

advance of a mile would have been sufficient, as it would have brought the enemy to a dominating hill from which he could have shelled and destroyed the railway line and barraged the country beyond for his turning movement south of Amiens.

At great cost of life he reached Moreuil and the neighbouring wooded hill dominating the angle between the Luce and Avre rivers, and affording magnificent observation and cover for a direct advance to the railway by the northern short cut. But as the small, overwhelmed French garrison was slowly and stubbornly retiring, the Canadian troopers galloped up, and, in a mounted charge, forced an entrance into Moreuil Wood. Dismounting under cover of the budding trees, they fought forward on foot, and by noon all the wood was theirs, and they were strongly established along the road running towards Demuin.

In Demuin and along the roads to the Somme the fighting was equally desperate. The Germans entered the important hamlet, which outflanked the Villers-Bretonneux positions, and again the cavalry had rapidly to spread forward in counter-attack and hold the ground until fresh battalions arrived.

The attack against the left wing of the French troops, between the Luce river and the Avre, did not fully develop. The cavalry did splendid work around Hangard in the early morning of March 31. Then, with their comrades, they attacked 104-Metre hill, rising between Hangard, Demuin and Moreuil. In three waves they stormed into the woods on the downland. The first wave reached the fringe of brown trees; the second wave went half-way through the woods; the third wave penetrated to the farther side. Then from the hill-top another fresh enemy brigade was seen pouring northward over open ground into the battle. This fresh attack was met by the guns of the R.H.A. and was repulsed.

The complete check, in front of the shortest approach to the decisive railway line, compelled the German commander to concentrate for the rest of the day against the French centre, some eight miles southward, between Moreuil and Mesnil. He worked division after division across the Doms brook, at the point where the green cliff of Grivesnes rose, between two hanging woods, above the trickle of water. Helped by travelling curtains of shell fire and covering barrages from massed machine guns, his storm troops gradually mastered the steep slopes and won the long stretch of high ground running up to Grivesnes village.

The Prussian Guards then entered the attack and succeeded in occupying the village, but were later thrown out by the French. During these operations armoured cars were used by the French with great effect.

By April 4, when Ludendorff resumed the struggle for the trunk railway, fresh Allied forces were well entrenched upon the hills by the network of marshes and waters. It was a day of mist and rain, and as the enemy had brought up his heavy artillery and registered upon his targets, he was able to destroy portions of the Franco-British foreground positions by weight of shell, and then hold the bits of ground he had won by pressure of numbers. Some 14 German divisions were employed between the Somme and Montdidier, and among them was the re-formed 1st Guards division, the 4th Guards division, and the Guards reserve division. Troops of this quality were not used for demonstrating purposes, and although, in the light of later events along the Lys, Ludendorff seems partly to have designed a new action to pin the Franco-British forces down, there can be little doubt that he also hoped to reach his objective—the railway.

The attack against the British troops was pushed with energy. New South Wales battalions, in and around Villers-Bretonneux, were heavily shelled, and then assailed on the southern flank by troops storming up from the lost French position at Hangard. In spite of their desperate resistance the Australians were gradually driven back and the town was occupied by the enemy. At the end of the afternoon some dragoons and lancers came to strengthen the New South Wales line, and at one a.m. on April 5 the important Villers-Bretonneux position was regained.

While the situation at Villers-Bretonneux still looked dismal, the French 1st army, connecting with the Australians of the British 4th army, was attacked on the old battlefield of Grivesnes, on a front of 10 miles. Round the Franco-British junction point, where the enemy in great force pressed directly towards Amiens, General Debeney lost some of the villages in the river valley, including Castel and Morisel. Yet he held firmly to all the important high ground, inflicting upon the enemy such losses as definitely brought the struggle for Amiens to a close. On April 5 the German commander shifted his point of attack and endeavoured to obtain a northward line of approach to Amiens. He struck across the Ancre at Dernancourt, to which the new Australian front extended. Again the line was driven in by gun

fire and rapid waves of assault, and at noon there was danger of an outflanking movement. By a determined counter-attack, however, the Australians met, wave against wave, the closing assault with which the enemy hoped to conquer the hills, and by nightfall the enemy was fought to a standstill.

On April 6 the French front was rectified between the Oise river and the Ailette stream by a gradual fighting withdrawal through the lower Coucy forest and past Coucy castle. This removed a dangerous salient, in which there was no room between the marshes and the forested upland of St. Gobain for the deployment of a strong force of defence. Early in 1917 it had been hoped to turn the dominating St. Gobain position by a Franco-British movement around St. Quentin. When the St. Quentin line was lost the marshy corner became dangerous to hold, and by a strong demonstration with some five divisions a new German army commander, General von Böhn, occupied the salient and prepared another surprise offensive along the Aisne. In the meantime the British army was again involved in serious defeat around Armentières and the Messines ridge, the circumstances of which are described in the following chapter. The ground about Amiens then became only a demonstration ground, across which Foch and Ludendorff feinted at each other for several months, while the clashes of their main forces were taking place at a distant point. There was, however, no certainty that the German commander had abandoned all thought of fighting out a decision around Amiens.

Throughout all the worry caused by the secondary and somewhat eccentric German offensive on a grand scale on the Lys, General Foch was carefully arranging with Sir Douglas Haig and General Pétain to transform the Amiens front of defence into a strongly organized line for a great return attack upon the enemy. This scheme had the advantage of being both a measure of prudence, strengthening the weak junction point of the Allied armies, and a means for engineering a surprise as soon as the United States effectives altered the balance of power in Europe.

For some weeks after the action of April 4 the fighting around Amiens was concentrated in and about the small angle of ground south of Villers-Bretonneux between the Luce stream and the Avre river. Hangard, a village on the Luce, formed a delicate salient in the Franco-British line, at the head of the curve where the British 4th army and the French 1st army connected.

It was held at various times by British troops and French soldiers, and sometimes by Moroccans and Australians side by side. Continually it was lost and recovered, being a point of supreme importance which the losing side violently coveted.

It was a fortified ford on the national road from Noyon and Roye to Amiens. The enemy therefore had excellent communications in arranging each attack. From the Luce valley on the south and the Aubercourt and Marcelcave hills on the west he could bring a cross-fire of guns to bear upon the low-lying corner, and also send his waves of assault forward in a double encircling movement. While the small, gnawing, incessant action between battalions and brigades was going on at Hangard, the German high command, on April 24, 1918, endeavoured to break through to the railway by Boves, and made a whirlwind attack upon Villers-Bretonneux. The enemy troops were enjoying one of their temporary sojourns in Hangard, which opened inviting approaches to the southern flank of Villers-Bretonneux, and enemy gunners gave warning that something was impending by continually searching for the British artillery positions.

Early in the morning of April 24 a serious attack developed on the Allied front between the Somme and the Avre valleys, in which four German divisions were engaged. It was preceded by a very heavy bombardment in which gas-shell was plentifully used. This took place during the three hours before 6 a.m. When the German guns lifted, the 4th division of the Prussian Guard with a division of Rhinelanders began to work forward from Hangard Wood and Marcelcave against British troops holding the village.

Behind the two leading enemy divisions were two other German divisions in full strength, all crowding upon a single English division. They were preceded by new large-scale tanks of a design not hitherto employed. One tank went over the Middlesex position and—crawling onward, its big guns firing and accompanied by bodies of infantry—forced the Middlesex and West Yorkshires backward. Other tanks and troops pressed the East Lancashires out of the village. When night fell the British troops were in a position similar to that of the Australian forces on April 4. They were holding out at Abbé Wood, but Villers-Bretonneux was a fortress crammed with machine guns.

In the night two Australian brigades came forward to attack, after the English troops had driven the enemy out of the eastern

woods. It was bad weather for a nocturnal operation. The moon was veiled in a thick, wet mist, and neither of the main counter-attacking forces knew the ground. The design was for one brigade to advance from the north-west, while the other was to work forward from the south-west, both sweeping past and beyond the village in the darkness, and linking eastward of it, with the enemy forces enclosed. English troops were to fight through the village.

With no artillery preparation to warn the enemy the encircling movement began with two Australian brigades (the 13th and 15th) and a brigade of the 18th division as the pincer forces. They won forward with bayonet rushes, machine gun duels and bomb attacks, through unknown country at night, with the enemy all round them. The colonel of the Queenslanders was met at dawn by a German officer with a message from the commander of the 4th division of the German Guards. The message was: "You are completely surrounded by three divisions of the German Guards. If you do not surrender the heavy artillery will immediately be put upon you, and you will be annihilated." A later pencilled message ran: "Officer commanding troops must come at once with German soldier."

The officer did come, but with many German soldiers. He moved a company back through the town, fighting and collecting prisoners, while the main forces of the superb counter-attack connected at daylight eastward of the village after a series of amazing adventures. Commenting afterwards on this action, Sir Douglas Haig said:

> A night operation of this character, undertaken at such short notice, was an enterprise of great daring. The instant decision to seize the opportunity offered and the rapid and thorough working out of the general plan and details of the attack on the part of the 3rd corps commander, and divisional and subordinate commanders concerned, are most worthy of commendation, while the unusual nature of the operation called for the highest qualities on the part of the troops employed. It was carried out in the most spirited and gallant manner by all ranks. The 13th Australian brigade, in particular, showed great skill and resolution in their attack, making through belts of wire running diagonally to the line of their advance, across very difficult country which they had no opportunity to reconnoitre beforehand.

When during the afternoon Villers-Bretonneux was taken over 1,000 German prisoners had been captured.

It was during this attack that British and German tanks came into conflict for the first time. Four large German tanks came upon two British tanks of the "female" kind armed only with machine guns. Armed with heavier guns, the Germans crippled one of the British light tanks, but a British "male" tank succeeded in disabling a German heavy tank which was left derelict on the field and was afterwards salved.

So ended the long struggle for the Amiens railway and the Franco-British lines of communication. By failing completely to reach his first important objective, Ludendorff saw all his costly tactical local successes merged into a great strategic reverse. He had severely punished the British 5th army, and he had inflicted heavy losses upon the British 3rd army. He claimed to have taken between Vimy ridge and the Ailette river 95,000 prisoners, with 1,300 guns, from March 21 to April 25, 1918. Some of his figures were known to be exaggerated. He claimed to have captured more guns than the British had lost! His material spoil of war, however, was undoubtedly great.

Before leaving these battlefields to follow the course of events farther north it is necessary to refer briefly to the controversies which have raged and will continue to rage round this "great retreat" of March and April, 1918. The reverses of the 5th army and the terrible losses which it incurred led to the dismissal of its commander, Sir Hubert Gough, who thereafter was allowed no active part in the war. Blame was laid upon him (and, by inference, on the troops under his command) for retreating too precipitately, and for abandoning positions which by more skilful disposition of forces and greater tenacity of purpose might have been held longer. Undoubtedly the retreat caused great perturbation in government circles, and something approaching panic among those sections of the civil population already weary of war to the point of hysteria. Panic demands its scapegoats, and whatever may have been the justice of the decision, it was in accordance with the custom of war that the commander chiefly responsible should be made to suffer.

The matter was brought before the House of Commons, and, with feeling still bitter, Mr. Lloyd George, as prime minister, secured a large majority in support of his statement of the case. But at the time, and afterwards, Sir Hubert Gough found many sympathizers. Not the least skilful pen used in his defence was his own. His book, "The Fifth Army," published 13 years

afterwards, contained much to rebut the accusations made against him, and when it was serialized in a daily newspaper excited hundreds of his old comrades to write in his support.

For though the technical aspects of his defence may still be weighed in the balance by military historians, no one can doubt the sincerity or truth of his vindication of the troops under his command. In no actions of the war can men have suffered more severely or have been called upon to endure their sufferings without relief for so long a period. To the physical handicaps of retreat must be added always the element of despair. The soldier on the field knows nothing of the general features of the battle and that some strategic gain may be compensating for purely tactical losses.

In this case he knew only that through days of rearguard actions, of forced marches, of sleepless nights, he was being driven farther and farther back by an enemy with apparently inexhaustible forces. In such circumstances it is a wonderful tribute to the men of the 5th army that they kept the spirit and steadfastness which distinguished them. Again and again they turned to fight and to delay their pursuers. Troops that had laid down to rest for a few hours were constantly called upon to form a rapid line of defence and meet a sudden onslaught from an unexpected quarter. The days of battle were marked by countless gallant deeds of men who sacrificed themselves in hopeless straits rather than surrender, of others who, conforming to the general retirement, never hesitated to turn and fight again when hand-to-hand conflict was offered to them.

In his valediction to his troops Sir Hubert Gough has used these moving words:

> Hold up your heads high with pride. History will proclaim the greatness of what you did. It can be said of no other troops that they did more to win the war. You are the remnants of a gallant band of brothers, buffeted by adversity and grievously maligned, yet your spirit is too fine to be damped by such misfortunes: you are the men on whom Britain is based.

Lord Birkenhead, in his " Turning Points of History," has this sentence : ". . . the front still stood, and Ludendorff's last throw had patently failed. Amiens was saved; so was Paris; so were the Channel ports. So was France. So was England."

But history demands an unimpassioned recital of the actual circumstances as they presented themselves at the time. Sir

Douglas Haig, after the fullest reflection, for his dispatch was not published until the following July, thus summarized the reasons for the retirement. In a précis of his own words these were as follows:

Firstly, he asserted that the forces at the disposal of the 5th army were inadequate to meet and hold an attack in such strength as that actually delivered by the enemy on its front. The extent of the British front made it impossible to have adequate reserves at all the threatened points, and it was therefore necessary to ensure the safety of certain sectors which were vital, and to accept risks at others. In certain sectors it was of vital importance that no ground should be given to the enemy. But in the southern sector, and here alone, it was possible to give ground to some extent, without serious consequences, under extreme pressure. The troops holding this latter part of the front could fall back to meet their reinforcements, which need not necessarily be pushed forward so rapidly as elsewhere. Moreover, the southern sector could be reinforced more easily with French troops than any other portion of the British line, and therefore Sir Douglas Haig considered it unsound to maintain a considerable reserve of British troops south of the river Somme.

Accordingly, instructions were given to the 5th army early in February to act, both in regard to defensive operations on the ground and in the actual conduct of the defence.

Secondly, the front south of the river Omignon was only taken over by the British some seven weeks before the enemy's attack, a period insufficient to ensure that the scheme of defence would be in an efficient state of preparation. Defences in this sector were inadequate to meet any serious form of attack. This state of things involved a great deal of work for the 5th army in improving the defences as rapidly as possible. But in this devastated area great difficulties were met with. The roads were in a bad condition, there was no light railway system, the broad gauge system was deficient, and there was a serious lack of accommodation for the troops. Labour was limited, all available labour units in rear of the forward defensive zones being allotted to the construction of the Péronne bridge-head defences, which were considered of primary importance. The result was that practically no work had been carried out with the object of securing the line of the river Somme itself.

Thirdly, the thick fog which enveloped the battlefield on the morning of March 21 and 22 undoubtedly masked the fire of artillery, rifles and machine guns. This was especially serious where the defences were more lightly held, as in the southern sector of the 5th army front, and where the posts depended for their maintenance on the cross fire of artillery and machine guns. The masking of this fire by mist enabled the enemy to penetrate and turn the flanks of certain important localities.

The fourth reason advanced by Sir Douglas Haig arose from another unusual weather condition to which reference has already been made. On the extreme right, the valley of the Oise, normally marshy and almost impassable in the early spring, was, owing to the exceptionally dry weather, passable for infantry almost everywhere, and formed no serious obstacle. This applied equally to the valley of the river Somme, which in the latter stage of the battle was easily negotiated by the hostile infantry between the recognized points of passage. A much larger number of troops would therefore have been required to render the defence of these rivers secure. These forces were not available except at the expense of other and more vital portions of the front.

Lastly, the French had been to some extent hoodwinked by extensive preparations for an offensive on the Reims front. Great artillery preparations on both sides of Reims accompanied the bombardment of the British line. This threat of attack on an important sector of their front necessarily influenced the distribution of the French reserves.

So much for the reasons which appeared to Sir Douglas Haig to explain and justify the retreat. Sir Hubert Gough is far more particular in his explanation of the causes of his retirement. In any case, he claims that the retreat was "a clearly defined manœuvre foreseen months before it took place, sanctioned by the commander-in-chief, and planned and prepared in great detail," and that if the 5th army had attempted to hold its ground "at all costs," and—"if the tactics had not been those of a great rearguard action—the whole army might have been overwhelmed; in fact, almost certainly would have been, in the first two or three days' fighting."

CHAPTER 5

Battles of the Lys

Both Moltke and Falkenhayn had endeavoured to turn the northern flank of the western Allies by attacks upon the lines around Ypres. On April 9, 1918, Ludendorff followed the course of his predecessors, and, after failing to break through at Amiens and at Arras, made a sudden drive in the direction of Dunkirk, Calais and Boulogne from the ridge in front of Lille.

This strong enemy position had been a constant menace to the northern British forces and the Belgian army. Prolonged and costly attempts were made by Sir John French in the spring of 1915 to advance from the marshland at Neuve Chapelle and Laventie to the rampart of Lille defences rising between La Bassée and the Lys river. Later conquest of the more northerly ridges at Messines and Passchendaele did not compensate for the early failure to win the high ground east of Neuve Chapelle. The British line there remained weak, and its weakness was of more than military importance. Immediately behind the dominated section of the British front were the coalfields of Béthune, from which the French managed to continue to extract a considerable quantity of fuel. The remnants of the northern French coalfields were still being worked, and helped to relieve the strain upon British mines and British collier-ships. Thus the German commander had an immediate objective of importance in an advance from the Lille ridge, as well as a final objective in the chain of French Channel ports running down to the narrow strait of Dover.

He had prepared for the attack at the same time that he had laid his plans for the major offensives of the preceding month, and Sir Douglas Haig was well aware of the possibility of an attempt to break through along this sector of his line. Without discounting the likelihood that the German preparations might be a deliberate attempt to mislead Allied headquarters, and draw their attention from the real objective of the major attack, it was also obvious that they might put their subsidiary plan into effect should that main offensive be at any point held up.

This is exactly what happened, and when on March 30 it became clear to the German supreme command that they could make no further progress in the southern battle area they fell back on their subsidiary scheme. They had much to gain from its success. A successful attack towards St. Omer-Hazebrouck might enable them to cut the only lateral means of communication, the St. Pol-Lillers-Hazebrouck railway, possessed by the Allies in this action, and thus disturb very seriously the movement of supplies and reinforcements. It would also enable them to retain the initiative at a most critical juncture, when they were anticipating the development of strong French counter-attacks in the southern battlefields. Here the depth of the advance had left the German line with a dangerously exposed flank between Noyon and Montdidier which was particularly open to a counter-stroke by the French.

The Germans also knew that the line which they now proposed to attack was largely held by exhausted and weakened divisions which had been withdrawn to a quieter sector after continuous fighting round St. Quentin and the Somme, and had not yet had time properly to absorb and train their reinforcements. At the same time they were aware that their armies on the southern sector still constituted a menace which would prevent Haig from calling for any substantial reserves from that front.

Again the weather favoured the Germans. Just as the summer of 1917 was exceptionally wet, when persistent rain added immeasurably to the difficulties of the British attacks, so the early winter months had been abnormally dry, and the ground was in excellent condition for offensive movement long before it would have been in a normal year. It has been shown what an advantage occurred to the Germans through this vagary of the weather in their more southern battles. Precisely the same advantage was in their favour when they proceeded to cross the valley of the Lys.

The German forces engaged included Quast's 6th army, consisting of four corps of which nine divisions were in the line and five in reserve, and the plan of operations allotted to this army was to strike between Armentières and the La Bassée canal in the direction of Hazebrouck. The German 4th army under Armin with two reserve corps was entrusted with the envelopment of Armentières, with the ultimate object, if all went well, of capturing the high ground between Kemmel and Mont des Cats,

south of the Ypres-Poperinghe road. Success in this enterprise would leave the British and Belgian positions in the Ypres salient exposed to attack from the rear.

The British army commanders upon whose line the initial attack fell were Sir Henry Horne and Sir Herbert Plumer. They were left, in the grand crisis upon the western front, with a force insufficient to counter the enemy's blows. Among the few fresh divisions by the Lille ridge were the 55th West Lancashire division, holding the Givenchy positions, and the Portuguese 2nd division, holding a front of seven and a half miles at Neuve Chapelle and Laventie. Even the Portuguese division was below strength to the extent of some 5,800 men, and was about to be relieved by a British force.

The relieving and supporting British forces consisted of tired troops. The 9th division of Scotsmen and South Africans, who had made a fighting retreat from Gauche Wood, occupied the line about Hollebeke towards the Messines ridge. In and about Ploegsteert was the 25th division that had saved the line by the Cambrai-Bapaume road. In Armentières was the 34th division, which, at very heavy cost, had broken von Below's shock battalions at Croisilles. The Highland Territorial division (51st) was in support of the Portuguese by the Lawe stream. The 50th division, recently withdrawn from a week of continuous fighting south of the Somme, was brought into action on the Lys river line, while the 31st division, the 4th division and the Guards division, with the 19th and 21st divisions, though exhausted by their actions around Arras, were again set in the line between Béthune, Hazebrouck and Ypres. Ludendorff and his staff knew that Sir Douglas Haig had no reserve, and had been compelled to use his worn forces in holding apparently quiet sectors of the front.

Having prepared everything for an offensive, von Quast's army was suddenly launched in an attack, on Tuesday, April 9. This attack was preceded by several days of heavy shelling. From eight to 12 o'clock in the night of April 7, a continuous bombardment of gas-shells was distributed over trenches, battery positions, billeting areas and ways of approach. This bombardment was continued with great intensity on the morning of April 9. Mist had gathered thickly in the night, and about 4 o'clock on that day an intensive barrage fell on all the British front from Armentières to Lens, and continued for six hours.

The bombardment was heaviest upon the Portuguese front. It lasted only an hour, yet in effect equalled in destructiveness the barrages at the opening of the St. Quentin battle, the German gunners searching unceasingly for the Portuguese headquarters, communications and railways. In the fog, about five o'clock in the morning, the guns suddenly lifted and let the storming battalions rush into Fauquissart and other advanced posts. The Germans easily pushed through or worked around broken parts of the Portuguese first line, and by seven o'clock in the morning were attacking the second line.

Less than four hours afterwards the third line at Laventie was broken in places in spite of the fact that one Portuguese battalion stubbornly clung to its last advanced position at La Couture, fighting until all ammunition was expended, and then holding out with the bayonet in the hope of getting boxes of cartridges through the enemy's barrage. The division lost 317 officers and some 7,000 men in the action between Neuve Chapelle and the river Lys. The Portuguese were the first to be attacked under cover of the fog, and in view of the fact that they had not before been seriously engaged in battle, their precipitate retreat may be understood and condoned.

The Lys line was the battle zone of the British army, but the enemy drove forward with such speed that he seemed likely to carry the main position in a single rush. Much of the credit for preventing a complete penetration was due to the 55th division. Pivoting on Givenchy hill, immediately on the right of the broken Portuguese force, men of the 51st division fell back on the village line, leaving the attacking forces in a maze of sunken roadways and connecting trenches.

It was puzzling ground, and while the German forces were exploring it the defending British troops returned by short cuts and roundabout routes and killed or captured many of their attackers. Their prisoners numbered nearly 1,000, but this number represented only a fragment of the trapped attacking force. Some of the men of the King's Liverpool Regiment, on the other hand, were compelled to withdraw from a strong point among the marshes, and an enemy garrison of two companies occupied the keep in the afternoon in preparation for another leap forward. In the evening, however, the Liverpool men made a counter-attack, in which all the German garrison was killed, with the exception of two men who were captured.

Imperial War Museum

THE KING WITH THE NEW ZEALAND FORCES. Throughout the war King George paid visits to the western front to review the troops, thus encouraging them by his presence. He crossed to France in March, 1918, shortly after the Germans launched their offensive on the Somme. There were no reviews. The king simply went among his soldiers to cheer the tired men He is here seen among the New Zealanders.

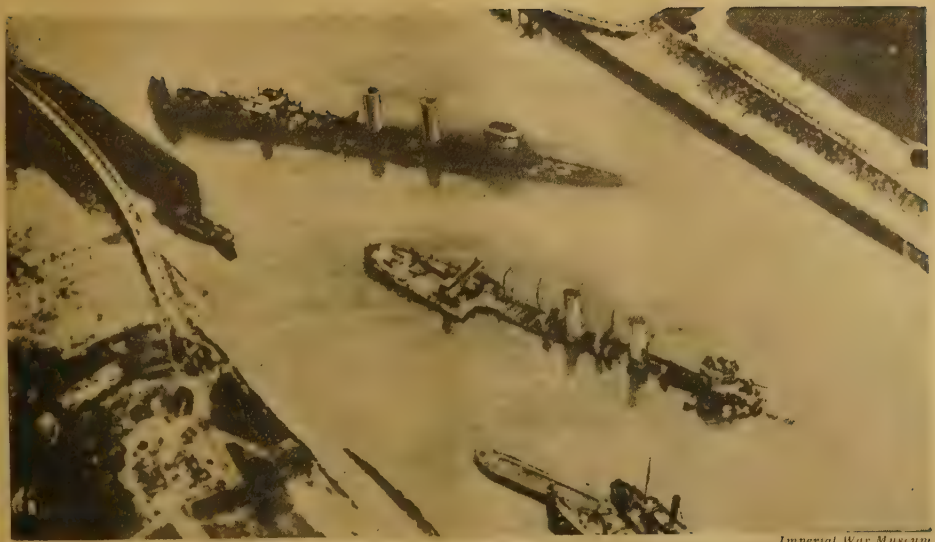
The ferry-boats Iris and Daffodil which were used to carry boarding parties to the Zeebrugge mole. They formerly plied on the Mersey, and after the war Daffodil returned to Liverpool to resume her work as a ferry steamer. In 1933 she was transferred to the Medway.

H.M.S. Iphigenia, the obsolete cruiser that blocked the Zeebrugge-Bruges canal. One of three blockships—Thetis and Intrepid being the others—she was successfully sunk so that German submarines could not use the canal.

THREE NOTED SHIPS AT ZEEBRUGGE

Imperial War Museum

PLAN OF ZEEBRUGGE AFTER THE RAID. Zeebrugge had been left intact when evacuated by the British navy in 1914, and formed a submarine base for the Germans. On April 23, 1918, an expedition under Vice-Admiral Roger Keyes sealed up the mouth of the canal with blockships (see Plate 6). The light-shaded portion of this plan represents foreshore.



Imperial War Museum

AIR VIEW OF THE BLOCKSHIPS. While Vindictive, with the ferry boats Daffodil and Iris, covered by Warwick and destroyers, created a diversion by landing a party on the mole at Zeebrugge which the explosion of a submarine under a viaduct had isolated from the land, Thetis, Iphigenia and Intrepid crept in. The first grounded prematurely, but the two last were neatly sunk, effectively sealing the entrance to the canal.

When the German infantry broke through the Portuguese positions on the left, the Lancashires formed a defensive flank running from Givenchy through Festubert to Le Touret. At one time both Givenchy and Festubert seemed lost, but were completely recovered by the West Lancashires, who then held on for six days of continuous fighting to the Givenchy-Le Touret line.

According to a German order found on all officers and under-officers of the 4th Ersatz division, the West Lancashires were troops below the average quality and fit only to hold a quiet sector. Six of the English companies were attacked by three German brigades, but the men who were regarded as being "below the average quality" completely broke all hostile attacking forces when, by a feat of heroic endurance and fighting power, they saved the French coalfields and the town of Béthune, and prevented a local reverse from spreading into a disaster.

"The success of this most gallant defence," said Sir Douglas Haig, "the importance of which it would be hard to over-estimate, was due in great measure to the courage and determination displayed by our advanced posts. These held out with the utmost resolution though surrounded, pinning to the ground those parties of the enemy who had penetrated our defences and preventing them from developing their attack." One instance stood out from among the very gallant deeds which distinguished this defensive action. A machine gun team kept its gun in action although the German infantry had entered the rear compartment of the "pill-box" from which it was firing, the gun team holding up the enemy by revolver fire from the inner compartment.

At Fleurbaix, on the right of the Portuguese 2nd division, the British line held as firmly as at Givenchy. An hour after the battle began some of the British troops were fighting in the German front line trenches in a most successful counter-charge. Where the Portuguese trenches were overrun, however, the Germans made a flanking swoop upon Fleurbaix, and at 11 o'clock in the morning some of the Suffolks were almost surrounded at Canteen farm, but, nevertheless, they held back the enemy masses for six and a half hours. "Very gallant service," commented the commander-in-chief. At the same time the Yorkshires stubbornly clung to their foreground positions by Bois Grenier, preventing the enemy from turning the position at Armentières directly from the south. Not until 11 o'clock at night did they fall back and cover the gas-drenched town.

Meanwhile, the broken ends of the British line were joined together by the 50th division and the 51st division. Both these forces, as has been told, had fought to the point of exhaustion between the Hindenburg line and the Somme river. Before they could enjoy any proper rest, they had again to attempt a prolonged effort of resistance against fresh hostile troops.

In the enlarging gap left by the Portuguese, the Highlanders of the 51st division advanced to extend the defensive flank of the West Lancashires above Béthune, by the Lawe stream and the Lawe canal round Vieille Chapelle, three miles west of Neuve Chapelle. The men of the 50th division extended above the 51st along the shallow, canalized river Lys, which, with its wooded bridges, iron drawbridges and fordable places, was a weak obstacle to an attacking force of 110,000 men. In spite of a strong resistance, therefore, the right of the 40th division was pressed back over the Lys at Bac St. Maur.

The task of the 50th division was extremely difficult. At some distance beyond the river was a line of posts, 500 yards apart. These posts were swiftly carried by the enemy, and while he barraged the river approaches, the defending forces had to reach the line of the Lys, cross it and throw out bridge-head forces before the Germans. They suffered serious losses in coming through the German fire curtain, but the men reached the Lys, and with their machine guns, trench mortars and rifles held off the enemy while the bridges were being destroyed.

At the drawbridge by Estaires the masses of assault were held for an hour until the great structure of steel and concrete was blown up. But the explosives used did not completely shatter the bridge. Some Germans crossed but were repulsed, and Estaires when night fell was still held by British troops. Below Estaires the Germans, during the afternoon and night, attempted a turning movement upon Béthune, but made little headway. But about 3 p.m. on the afternoon of April 9, they did succeed in crossing the river in small parties at Bac St. Maur, east of Sailly sur la Lys. These small parties were gradually reinforced, and they were able to continue their advance to Croix du Bac. Despite counter-attacks by a brigade of the 25th division they were able to establish a strong hold on the north bank of the river during the night.

Further crossings were effected on the morning of April 10, a warm, foggy day admirably suited to offensive manœuvre. At

Lestrem and Estaires, counter-attacks of the 51st division were at first successful, but the Germans were determined to reach Estaires on this day, and captured the town in the evening after fierce street fighting in which the machine guns of the 50th division were used from the upper windows of houses.

The crossing of the Lys was also continued in force by the German infantry, followed by their artillery, east of Estaires. The British retired to a position north of Steenwerck. Between Frélinghein and Hill 60 a very heavy bombardment fell at 5.30 a.m., and in the line north of Armentières and east of Messines the outposts of the 25th and 19th divisions were early captured by the Germans. This success was followed by an advance along the valleys of the Warnave and Douve rivers. Ploegsteert village and Messines fell as well as the south-east parts of Ploegsteert Wood. The forward positions at Hollebeke were also abandoned and the British line fell back to Wytschaete ridge. Messines was recaptured by South African troops early in the afternoon by a determined counter-attack. A more spectacular loss on this day was the fall of the town of Armentières. The enemy's advance farther north made withdrawal imperative if the 34th division, which was holding the town, was to be saved. The division retreated by the north bank of the Lys river, destroying the bridges behind them.

On April 11 the German advance continued. Although it is now possible to write dispassionately of this series of reverses there is no doubt that they were felt very severely at the time. Within a fortnight the British army was again in general retreat, and from positions that had been lately won by the most heavy sacrifices of life. On April 11 the most cheerful news, from the British point of view, came from the sector between Givenchy and the Lawe river, where a successful resistance was maintained. Elsewhere the outlook was gloomy enough, and in Britain itself rumour played with stories of a complete defeat, of the evacuation of general headquarters and of a wild scramble to the coast.

It was, indeed, one of the most critical weeks of the war. When reinforcing battalions were sent into the line they received the order to hold the enemy "at all costs," for there were periods when there was nothing but the thin line of defence which they were able to provide between the advancing Germans and the Channel sea-ports. A brigade of the 29th division which only the night before had been relieved from a long period of duty in the

Passchendaele line was brought up in buses from round Poperinghe on the night of April 9, and after a day spent in vigilant support in Neuf Berquin, was thrown into the line in front of Merville.

The orders of the battalions were "to stop the rot." They stopped it from dawn till three o'clock in the afternoon at the cost of all their ammunition and most of their lives. The incident was typical of the fighting in these confused battles. After the first resistance, which was completely successful, there was a lull during which the front line troops were left under the impression that they had beaten off the main assault. Then gradually as the hours passed they became aware of ominous fire coming from their rear. Men began to fall shot through the back. Movements of German troops, clearly observed to left or right, appeared at the time to company officers who were closely engaged to be no more than skirmishes on their flanks which would be dealt with by their supporting battalions. Actually they were wide encircling movements, which were carrying the enemy miles behind the unhappy line of first defence. Following the tactics so successfully employed during the March offensives, the Germans deliberately left large sections of this first line still holding on "at all costs" until they had penetrated through gaps, to positions far in their rear. Then at their leisure they bombed and bayoneted the marooned front line position, the men in which, being surrounded, were faced with the alternatives of death or surrender.

The rapidity of the German advance inflicted great hardship on the French civil population. Villages which had been little molested either by gun fire or aerial bombardment were hurriedly evacuated and often left to complete destruction. So urgent was the peril that homes and farmyards had to be left at a moment's notice, and British reinforcements billeting in the cottages frequently found fires still alight in the kitchen grate and food cooking on the stove. The roads were choked with farm wagons into which the wretched civilians had piled the most precious of their possessions. Vast quantities of British stores had also to be abandoned, and whole B.E.F. canteens were left to be plundered by the victorious Germans.

Ludendorff's immediate goal was the railway junction of Hazebrouck, along which the main communication line of Sir Herbert Plumer's army around Ypres ran through the Flemish hills,

between Cassel, Steenvoorde, Mont des Cats, Mont Noir and Mont Rouge, the Scherpenberg, Kemmel hill, and the Wytschaete-Messines ridge. This long range of heights, dominating the lowland plain for many miles in clear weather, was the key to all the northern positions of British and Belgian forces; the rampart of the Channel ports, enormously strengthening the moat formed by the inundated river Yser. In ordinary circumstances the enemy commander might have been content to exploit the sudden breaking of the Portuguese line for its distracting effect. When Sir Douglas Haig was concentrating for the defence of Aire, Hazebrouck and Béthune, Ludendorff might have struck somewhere else. But the operations of the German commander were largely governed by his knowledge of the fatigued condition of most of the British divisions holding the line between Ypres and Béthune.

Ludendorff, therefore, reckoned that, by using another considerable part of his grand reserve, he could completely and rapidly wear down the British troops, before French and American reinforcements arrived along the Calais-Paris railway line. Also, the German emperor, with his sense of naval opportunities, was keenly alive to the value of the coast line.

The pocket formed by the Anglo-Portuguese withdrawal had a curious fascination for the enemy. It had the natural appearance of a great trap, with its hill rampart northward by Ypres, its forest cover westward by Hazebrouck, and its network of watercourses and fortified works southward by Béthune. But Ludendorff and his emperor reckoned that the spring of the trap was so weakened they could break it.

They gambled against the staying power of the British, who were being pursued by fresh shock divisions from the Cambrai, Somme and Arras fronts. As was afterwards seen on the Aisne, the German command relied greatly on increasing the physical strain upon the British troops as a means to achieving a decisive result. Informed by their secret service that some of the same exhausted divisions were in line, the Germans struck repeatedly in the hope of annihilating them.

Sir Douglas Haig was naturally anxious when blow after blow fell upon those of his men for whom he vainly tried to find quiet sectors. Instead of giving them the rest they needed, he had to employ them once more in order to preserve his strength around Amiens, where the peril still remained greatest. In his famous

special order of the day he called upon his much-enduring troops to fight to the end, in words like those with which Marshal Joffre rallied the French armies in the first battle of the Marne:

To all ranks of the British army in France and Flanders:

Three weeks ago to-day the enemy began his terrific attacks against us on a 50-mile front. His objects are to separate us from the French, to take the Channel ports, and destroy the British army.

In spite of throwing already 106 divisions into the battle and enduring the most reckless sacrifice of human life, he has as yet made little progress towards his goals. We owe this to the determined fighting and self-sacrifice of our troops.

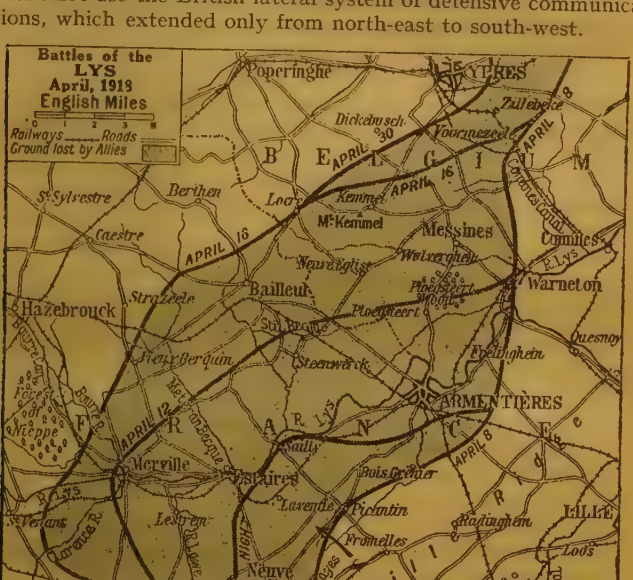
Words fail me to express the admiration which I feel for the splendid resistance offered by all ranks of our army under the most trying circumstances. Many amongst us now are tired. To those I would say that victory will belong to the side which holds out the longest.

The French army is moving rapidly and in great force to our support. There is no other course open to us but to fight it out. Every position must be held to the last man; there must be no retirement. With our backs to the wall, and believing in the justice of our cause, each one of us must fight on to the end. The safety of our homes and the freedom of mankind depend alike upon the conduct of each one of us at this critical moment.

When this moving appeal was published the situation seemed very sombre round the lost town of Armentières. Ludendorff had decided to attack with all available strength. He appears originally to have had some 40 divisions more than the western Allies possessed in France and Flanders. This enabled him to rest his men considerably between the main actions. The drafts he obtained from Russia saved him from the necessity of breaking up shattered divisions to keep others up to strength, with the result that, although half of his Grand Army had been severely punished by the British forces, he still had something like 750,000 unused troops in the field, as well as a large number of rested men who had won successes. Undoubtedly in this sector he had a great advantage in possessing the town of Lille. Owing to its valuable factories, Lille was not subjected to shelling by the Allies' artillery. Thus troops sent there on leave had complete immunity and a real rest such as was never enjoyed by British troops in reserve about Poperinghe.

The artillery power which the enemy commander employed seems to have exceeded even that used by Below, Marwitz and

Hutier. Behind every German attacking division were 130 batteries, with 300 trench mortars and infantry guns. By April 13, a new concrete bridge was constructed across the Lys, and many new, direct roads were rapidly made to run from east to west, thus providing communications of attack. The Germans could not use the British lateral system of defensive communications, which extended only from north-east to south-west.



No pause in the operations marked this immense improvisation of means for carrying the attack against the line of hills. Already, by April 11, great forces of German infantry were gathering against the 9th, 25th, 34th, 50th, 51st and 55th British divisions and the comparatively small forces immediately in support. The Scots and South Africans still held to the crest of

the Wytschaete ridge, while the battalions of the 25th division were retiring from Ploegsteert Wood towards Neuve Eglise and the outer defences of Kemmel hill. The men of the 34th division swung back in line towards the rising ground by Bailleul, while their comrades had their machine guns covering the Steenwerck-Merville road, from which the line swung round the Clarence river to Neuve Chapelle, where it was held by the Gordon Highlanders, and on to Givenchy, where the West Lancashires were in position.

Along the whole of this large marshland bend, Armin and Quast made repeated attacks, covered by machine gun support. Each local issue largely depended upon the resource of the opposing machine gunners and the quickness with which the British infantry detected movements of storming-parties creeping forward to prepare positions for covering a coming mass attack. Sometimes the hostile advanced force was rushed and thrown back to the stronger machine gun line screening the main infantry, as was done by the Warwicks in the brickfield between Merville and Nieppe forest. It was often better, however, to watch the enemy's preparations, especially in clear weather, and mark the ranges at which an assault in strength could be checked by the British gunners. So long as the Lys plain was covered in mist, the enemy commander continued to derive great advantage from his high superiority in numbers. Concentrating secretly by day as well as by night, he avoided losses from artillery curtain fire and machine gun barrages.

Pilots on both sides had to fly as low as 200 feet above the ground in order to detect movements of forces, on April 9 and 10. Only in the late afternoon of Thursday, April 11, did the air begin to clear, when there was a great aerial conflict in which the enemy's squadrons were defeated, with the loss of 35 machines against a British loss of only four aeroplanes.

At any cost in aerial warfare the enemy endeavoured to obtain observation control for his artillery. He blasted his way into Merville, obtaining by this Lys town another way of approach to the forest defences of Hazebrouck, employing the extraordinary number of 12 divisions of infantry to win the town his artillery had gassed and shattered. At heavy cost of life his divisions crossed over the Clarence river, between the outskirts of Nieppe forest and Béthune, and approached St. Venant. This was General von Bernhardi's last shadow of success.

British divisions from the Amiens battlefield arrived in the nick of time at the corner of the great German salient. The 31st division, which had recovered Mory and held the line south of Arras in the last week of March, arrived on April 13 by the approaches to the Nieppe forest, and there made a line of defence which, with the help of the British Guards, was not shaken throughout the rest of the fierce battle on the British centre. The Guards relieved the 50th division on April 11 along the Hazebrouck-Estaires road.

At Robecq, between the forest and Béthune, the 4th division —fresh from its victory by the Vimy ridge—came into action soon afterwards, and made itself famous by a defence and a counter-attack even more costly to the enemy than his action below the Vimy slopes. In other parts of the field were the 19th, 29th, 33rd, 5th and 8th British divisions.

Sir Herbert Plumer would not give any further ground to Bernhardi. Not only were the Béthune coalfields of high military value, but any widening of the southern corner of the salient of attack would have allowed the enemy to begin a flanking manœuvre around the supreme central obstacle of Nieppe forest. By throwing strong reinforcements above Béthune the British commander compelled Quast to break his strength against a stretch of woodland five miles long and three miles deep, where nicely spaced machine gun posts, with screened infantry forces and artillery behind, proved impregnable barriers to the greatest German masses of men and guns that Ludendorff could spare from his general reserve.

The Germans adopted the sound, ordinary course of alternate or simultaneous blows against the sides of the salient. Between Givenchy and Hollebeke they occupied some 21 miles of the British line, and there had room for movement. By the Nieppe forest their line of attack was only 10 miles long, and subject, therefore, to enfilading gun fire from both flanks, as well as to frontal fire. Naturally, Ludendorff strenuously endeavoured to win more room on either flank, but Sir Herbert Plumer answered these attempts by gradually giving ground in the direction skilfully chosen by him.

In front of Kemmel hill only the 25th division, which had suffered seriously in the Ploegsteert action, held the first gate to the rampart of the Channel ports. It was impossible to relieve them and also keep the central and southern part of the line

strong. To find troops to replace outworn forces and extend the critical front when the salient had widened northward, Sir Herbert Plumer began to draw in round Ypres and yield to the enemy Passchendaele ridge, Poelcappelle, Zonnebeke, Langemarck, all of them scenes of equally bitter actions from October, 1914, to November, 1917.

It was a grave thing to abandon ground consecrated by the most dearly bought of British advances. But the spirit of the British soldier hardened under this sacrifice of positions for which many of his comrades had fallen. It reinforced the influence of Sir Douglas Haig's call for a fight to the death.

Just as the Ypres retirement was quietly beginning, the hard-pressed 25th division made a splendid defence of Neuve Eglise and the approaches to Kemmel hill. The Cheshires first took the weight of the attack on Friday, April 12, when a number of enemy divisions tried to break into the hills between Bailleul and Wytschaete. The Germans strove desperately to pierce the line at many points, and, after being repulsed at Bailleul and Wulverghem, concentrated on a final effort at Neuve Eglise.

At Neuve Eglise six vital roads met, including the lateral communications along the lower hillside and the upward routes to Kemmel and Ypres and Dranoutre and Locre. Holding the knot of ways, the enemy could take the eastern heights from the rear while developing an attack on the middle hills. Sir Herbert Plumer speeded up his withdrawal on Ypres, but time was won for him on Saturday morning, April 13, by the Worcesters, Sherwood Foresters, Yorkshire Light Infantry, and other troops, who recaptured the village and cross-roads, and for the time also relieved the pressure on Bailleul.

The enemy returned, covered by a bombardment of guns of all calibres, and through the Englishmen's machine gun barrage and answering artillery fire the survivors of his continuous waves gathered together for more rush attacks. Fifteen divisions were deployed on both sides of Bailleul, together with special storm troops, including men of an Alpine corps. Another German ally was a strayed bull, maddened by the bursts of fire, that charged a machine gun post. A most pathetic feature of these battles was the agony of animals left behind on farms, cows lowing to be milked, and sows who had been wounded, wandering about the battlefield until they were mercifully killed.

The defenders had not slept for days, and could not snatch

a brief rest, for fresh enemy brigades stormed upward as others fell back broken. At one time the Cheshires, Worcesters, Wiltshires and Staffords, who had fought since March 21, were in a hollow square around the village, with only a frail connecting line by the Dranoutre road. Finally, the King's Royal Rifles acted as rearguard to a withdrawal towards the hills, but the commanding officer of the Worcesters—a regiment famous for saving the line in the first action about Ypres—was the last man to leave Neuve Eglise.

The definite fall of Neuve Eglise exposed the Wulverghem and Bailleul positions to flanking attack and involved their loss. Bailleul fell on April 15, together with the strong, high line of Mont de Lille and the Ravelsberg, which were the outer defences to the high hills. South Staffordshires, Notts and Derbys, Lincolns, and other troops made a stand about Bailleul, where they directed a plunging fire upon the successive forces of attack. They took severe toll of the Alpine corps and two other picked divisions that eventually carried the falling, smoking wreckage of the picturesque hillside town, with the fine market square and friendly inns of both happy and sad memories. The British line ascending the slopes of the hills from Wytschaete still held, after being in continuous action for 120 hours against the German 4th army, to the approaches to the Mont des Cats by Meteren, and the direct, short route to Hazebrouck by Strazeele, upon which the German 6th army was advancing.

At the opening of the battle for the northern hills there was a struggle between Meteren and the northern edge of Nieppe forest. The German centre, after the tussle with the British Guards, endeavoured to avoid the woodland battle by outflanking the forest along the north. Scottish Rifles, Highland Light Infantry, West Surreys, Worcesters, Middlesex, New Zealand troops, dismounted Tank corps men, with other troops and odd men, succeeded in making a successful stand about the approach to Hazebrouck.

But having advanced to the foot of the hills, the German commanders prepared for another general action. On April 16, when the fog again veiled the battle plain, blows were struck at Wytschaete and the height of Spanbroekenmolen near it, along which the original British line had run. Both crests were lost, enabling the enemy to strike sideways as well as frontally at Kemmel. At the same time Meteren, by the upper corner of

the salient, was also stormed by the Germans, so that they had positions of vantage at both ends of their line of attack against the hill rampart. Counter-attacking forces recovered both places, but the Germans continued the struggle for them the following morning.

On the same day, April 17, Ludendorff tried suddenly to break through the Belgian line north-east of Ypres, and thereby throw into confusion General Plumer's forces retiring from the Passchendaele ridge. Attacked on a front of four miles by the forces of some four divisions, the greatly outnumbered Belgians gave ground; but, counter-charging almost immediately, recovered their line, taking 600 prisoners from the seven brigades used in opening the movement. This exploit by the Belgians was of great assistance to the British troops: it had a cheering effect as well as high material value.

The second stage of the battle was beginning. Ludendorff was trying to redeem his losses by showing that he had reduced the British armies to a condition of weakness. Apparently he did not yet believe any great British reserve existed. The first French reinforcement had just appeared on the eastern hills in the struggle around Kemmel, and Ludendorff desired to strike decisively with all possible strength before General Foch could help Sir Herbert Plumer with more of the Allied mass of manœuvre. Once more he swung the two attacking forces alternately against the two sides of the salient. After a heavy bombardment he attacked from Nieppe forest to Wytschaete, entering Meteren for the second time, and getting a footing again on Wytschaete ridge, but failing at Dranoutre and Kemmel hill.

The next day, after a night-long artillery duel, the southern offensive was resumed on a curve of 15 miles, from Nieppe forest to Givenchy. Against the British 1st division, that had relieved the West Lancashires, three German divisions advanced; but once again the enemy infantry was completely held up near Kemmel hill by the numerous works and ditches.

Then Béthune was assailed through Hinges and Robecq. A German division advanced in four waves against the veterans of Vimy ridge. It was shot down as it fled back to Pacaut Wood. Two other divisions then endeavoured to work forward, but only left prisoners in the hands of the British. Seven other divisions were deployed, mainly on open ground, in costly, fruitless attempts to reach the canal between Festubert and the

neighbourhood of Béthune. All that the Germans accomplished was to throw a bridge over the canal by Hinges, and walk across in the attitude of surrender to escape the dreadful sweep of the defender's fire.

Ludendorff could not accept defeat. In order to win ground to the north he had to widen the salient, and free his centre from the cross-fire that poured on his medium artillery, forcing his howitzer batteries to withdraw from good attacking positions. In the night of April 17 both the German artillery and infantry between Givenchy and Merville were strongly reinforced, and in the morning of April 18 the weight of fire upon the British 1st division became enormous.

Great damage was done to the defences, against which 11 in. shells were used; yet the defensive power of the troops was unbroken. They fought in the open, with machine guns, rifles, bayonets and bombs, from nine o'clock in the morning until eight o'clock at night, losing only two outposts, near Givenchy and Festubert. In the darkness the men raked the enemy's gathering-places, such as Pacaut Wood, demoralizing the first wave of assault before it moved out. It quickly broke in panic. Five minutes afterwards a stronger force came out, with a pontoon illumined by star-shells. A corporal of the Royal Engineers annexed the pontoon when the surviving Germans ran, and afterwards picked up a drifting British pontoon.

Then he bridged the canal, and took over a detachment of English and Scottish troops, who, in an action of three hours, captured some hundreds of Germans near Pacaut Wood, completely ending the offensive movement there. On the northern line the routine attacks from Nieppe forest to Kemmel hill were early broken. The German troops of the best quality—such as the Alpine corps from von Below's mountaineering forces in the Italian campaign—were dispirited by severe losses, amounting to one-half of some battalions, and by lack of regular food. The German supply columns were wrecked by the guns of the defence, the marshes being sown with bogged wagons and lost rations.

For the first time in a month of continual actions at extreme pressure, Ludendorff was constrained to pause. It had rained, and his experience of Polish mud was completed by a deep acquaintance, under offensive conditions, with Flemish mud. Flemish mud, combined with British gun fire from dominating hills and short-range and long-range British aerial bombardments,

proved an obstacle of terrible hindrance. Snow fell amid the rain, and the wind grew bitter, especially for ill-fed soldiers who had been heavily punished.

Ludendorff began to waver. It seemed as though he and his staff had miscalculated the immediately available reserve strength of the British armies, as well as the personal endurance of the British soldier. He thought of using his last elements of superior numbers in a supreme test of the French armies and, indirectly, of the United States reinforcements; but, while the new preparations were in train, he could do nothing more than improve his machinery of attack in Flanders.

Fog came on April 24, and the armies of Armin and Quast re-concentrated under its cover, and, with more new roads crossing the Lys, advanced upon the hill line from the neighbourhood of Ypres, at Vierstraat and St. Eloi to Locre. The high wood of Kemmel hill was saturated with poison gas, and on April 25 the heroic French garrison was overborne. For eight hours or more the French, after being encircled by a flanking movement, were seen by an aerial scout still holding the crest. He reported that the French had made a successful counter-attack, but he was mistaken. They were making their final stand, having sworn beforehand they would never leave Kemmel to the enemy while they lived. The loss of the great observation-post, 500 feet high, in a country of low-lying, marshy land, was a serious matter at the time. The Allied line was drawn back to the Grand Bois by Wytschaete and the lower Vierstraat, rising again by the Scherpenberg, where Locre, at a junction of roads between Kemmel hill and Mont Rouge and Mont Noir, was a key position which the French reinforcing troops had taken over.

Royal Scots, Camerons and Black Watch, after a violent action in the mist with strong enemy forces, held on to the ground by Wytschaete and closed a gap near Kemmel, where the victorious Germans were breaking through. Then supporting British troops made two relieving counter-thrusts into Kemmel village, the second of which was successful. Ground was lost on the left, where the famous bluff by the Ypres-Comines canal was taken by the enemy when the attack was renewed on the 26th.

The critical position was, however, Locre, which the French troops guarded. If the line of heights were riven in the middle, after the loss of Kemmel hill on the east, the situation of the forces about Ypres and along the Yser would be grave.

Spurred on by a keen sense of his instant opportunities, Armin and his army commanders, Sieger and Eberhardt, made a series of extreme efforts to reach the gate to victory. On Friday, April 26, they captured Locre, but their success was achieved too late. Locre returned to the possession of the French. A cavalry force rode hard for 60 miles northward and, dismounting, at once went into action, preferring rather to attack the enemy before he firmly dug himself in than to rest.

Defeated, finally, before Amiens about the time when he failed to pierce the northern line of heights in Flanders, Ludendorff had to recognize that all his grand strokes against the wings and centre of the British forces had failed of strategic effect. At a common loss to German and Briton, which told eventually against the German in a threefold manner, the enemy commander had won two large areas of useless ground, both of which he was soon ready to evacuate to save his man-power. He had united the Allies under the supreme, direct control of a man of high character and mind. He had provoked the British and American peoples to put forth their full strength, and so heightened the temper of the Allies that Mr. Lloyd George and President Wilson were able to raise the age for military service of their countrymen in 1918. He accelerated, by the threat of his temporary superior numbers, the gathering in France of a huge United States army, and weakened his own forces in a critical manner, while the Allies were growing generally stronger.

A great success against the French in the direction of Paris, while some of their forces were assisting the British by Ypres and by Amiens, was the last desperate measure for keeping the initiative that Ludendorff could conceive. He prepared to spend his final reserve of striking-power in this adventure, while urging the Austro-Hungarian command to cooperate by an offensive on the Italian front.

He fought a farewell fight for the Channel ports on April 29. His troops attacked from Meteren to Zillebeke lake against the British and French positions and also assailed the Belgian line north of Ypres. The 25th division, with the West Riding Territorials of the 49th division and 21st division, famous also in the previous Amiens and Cambrai battles, were among the forces of defence. Against a succession of assaults they held their lines, and the French on the Scherpenberg positions and Mont Rouge, after giving some ground, recovered Locre, inflicting

heavy losses on the enemy, as the Belgians also did. All the slight gains made by the German masses under cover of morning mist were lost in the counter-attacks of the Allies. In the confusion of a complete disaster, proving that the attacking troops were dispirited, the battle for the Channel ports came to an end. The ground was then only used for feinting purposes while an offensive against the French centre was being mounted.

Sir Douglas Haig in his summary of these operations paid tribute to the qualities of the officers and men of his armies. He said:

> In the battle of the Lys, as has been pointed out above, many of the same divisions which had just passed through the furnace of the Somme found themselves exposed to the full fury of a second great offensive by fresh German forces. Despite this disadvantage they gave evidence in many days of close and obstinate fighting that their spirit was as high as ever and their courage and determination unabated. Both by them and by the divisions freshly engaged every yard of ground was fiercely disputed, until troops were overwhelmed or ordered to withdraw. Such withdrawals as were deemed necessary in the course of the battle were carried out successfully and in good order.
>
> At no time, either on the Somme or on the Lys, was there anything approaching a breakdown of command or a failure of morale. Under conditions that made rest and sleep impossible for days together, and called incessantly for the greatest physical exertion and quickness of thought, officers and men remained undismayed, realizing that for the time being they must play a waiting game, and determined to make the enemy pay the full price for the success which for the moment was his.

He added:

> On countless other occasions, officers and men, of whose names there is no record, have accomplished actions of the greatest valour, while the very nature of the fighting shows that on all parts of the wide battle fronts unknown deeds of heroism were performed without number.

CHAPTER 6

The Heroic Attacks on Zeebrugge and Ostend

EVER since the Germans had established submarine and destroyer bases on the coast of Flanders, the question of making an attack on these places had been repeatedly discussed by British sailors. Many schemes were put forward, but they were all rejected, the Admiralty feeling that they were doomed to failure.

In order to understand the Admiralty's attitude it is necessary to have a knowledge of the nature of the proposed objectives. The chief of these were the former Belgian ports of Zeebrugge and Ostend, both of which were connected by canal with the inland port of Bruges. Bruges was the main naval base for the smaller enemy vessels intended to operate in the North Sea. On an average there were about 20 submarines and rather more destroyers at Bruges, where they repeatedly put in to replenish their fuel, stores and ammunition. Here were large concrete shelters erected as a safeguard against aerial attack. At Ostend and Zeebrugge, its ports of exit to the sea, were stationed craft used for patrolling, mine-laying and mine-sweeping, and a few destroyers and submarines.

The port of Zeebrugge was the more important of the two, as the canal which connected it with the inland base was deeper and straighter than its counterpart at Ostend, and larger vessels could therefore make its passage. Here was situated the largest aircraft base on the Flanders coast. At the sea end of both canals were large locks which enabled ships to leave and enter at any state of the tide. The lock gates were so designed that they could be drawn back into large concrete bomb-proof shelters on the first signs of danger. The channels leading to the canal entrances, although tidal, were constantly dredged.

For the purpose of protecting the entrance to the Zeebrugge canal a large mole, a mile and a half in length, had been

constructed. It stretched from the shore, about half a mile west of the canal entrance, and curved round northward and eastward, protecting an area of about 300 acres from northerly and westerly gales. The mole was divided into four portions. Firstly there was a stone railway pier built into the sea for a distance of about 250 yards. This pier joined on to a second portion which consisted of a steel railway viaduct 330 yards long. The viaduct joined on to a third portion which formed the mole proper, its length being approximately one mile. At its north-eastern end was the fourth section, which consisted of an extension about 250 yards long and 15 feet broad, on the end of which a lighthouse was situated. The canal entrance at Ostend was not so open, and was not, therefore, protected by artificial means.

Both these places were strongly fortified, and all along the coast between them heavy batteries were hidden among the sand-hills. At the western end of the Ostend sub-section were four batteries all emplaced along the sea front. These were the Antwerpen, consisting of four 4.1 in. guns, the Aachen, the Beseler and the Cecile, the last three consisting of four 5.9 in. guns apiece. On the eastern side of the harbour were three other batteries, the Friedrich, the Hindenburg and the Irene.

The fortifications at Zeebrugge were even more formidable. Situated at the western end of this section were the coastal batteries Croden (four 11 in.), Cäsar, consisting of anti-aircraft guns, and Kaiserin (four 5.9 in.). To the west of the mole was situated the Württemberg battery with four 4.1 in. guns and an anti-aircraft battery. To the east of the canal were the Friedrichsort (four 6.7 in.) and the Kanal (four 3.5 in.), whilst in the immediate vicinity were situated other powerful guns, all capable of inflicting heavy damage on any force venturesome enough to launch an attack. On the extension of the mole were three 4.1 in. guns and two 3.5 in. guns; about 150 yards from the end was a wired-in position with two anti-aircraft guns, the crews of which were housed in large bomb-proof sheds. On the south-western end a seaplane base was situated. Altogether, the Germans had placed no fewer than 56 heavy, medium and anti-aircraft batteries, consisting in all of 225 guns, along the Belgian coast. In addition to the shore defences, the sea all along the coast was heavily mined.

The Admiralty's action in refusing to sanction any plan for an attack on these places can now be understood. Towards the

end of 1917, however, the activity of the enemy submarines had become so alarming that it was felt that some action to cripple or destroy this menace should be undertaken.

When Vice Admiral Sir Roger Keyes became director of the plans department at the Admiralty he was handed a large dossier containing schemes for an attack on the Flanders coast and ordered to make a report on them. On December 3, 1917, he submitted a plan by which Zeebrugge and Ostend were to be attacked simultaneously and the entrances to their canals blocked. This scheme was put before Admiral Bacon, then in command of the Dover Patrol, who, after considering it, placed an alternative scheme before the Admiralty. This new plan differed somewhat from the scheme prepared by Admiral Keyes in that an assault on the mole at Zeebrugge was added to the blocking operation. After careful consideration these plans were finally passed by the Admiralty, who decided that an attack should he made along the lines suggested by Admiral Bacon.

As soon as this decision was reached, the task of raising the necessary officers and men was begun, Admiral Keyes visiting the Grand Fleet for this purpose. On his return from this visit, however, he was appointed to succeed Admiral Bacon at Dover, and was given a free hand by the Admiralty to carry out the projected attack as he thought best. On taking over his new appointment, Keyes was not long in finding out the weak spots in Admiral Bacon's scheme, and he made several modifications.

The new plan was to be carried out as follows : Five old cruisers were to be fitted out as blockships ; three of these were to be sunk in the channel to the canal at Zeebrugge, and two at Ostend. These operations were to be preceded by a long-distance bombardment and an aerial attack ; after which a close-range attack, embodying the use of storm troops, was to be made on the mole at Zeebrugge in order to divert the enemy's attention while the blockships steamed into position and were sunk in the channels. For Ostend, an attack by storm troops was not deemed necessary. The operations were to be carried out under cover of darkness and helped by artificial fog, which would be laid by fast motor-boats to cover the approach of the attacking force. Two old submarines filled with high explosives were to be wedged under the railway viaduct connecting the mole at Zeebrugge with the shore, and this was to be blown up, thus preventing reinforcements coming up to assist the enemy on the mole.

This course of action having been decided upon, Admiral Keyes took immediate steps to prepare his ships and men for the exploit. His first task was the selection and fitting out of the stormships and blockships. Six obsolete cruisers and two old submarines were to be used. Five cruisers, the Brilliant, Iphigenia, Thetis, Sirius and Intrepid were converted into blockships, filled with concrete so that their hulls would be difficult for the Germans to destroy, and fitted with mines so that they could be swiftly sunk.

The sixth cruiser, the Vindictive, was specially equipped for carrying a storming party to the great mole which protected Zeebrugge. This vessel was provided with 18 gangways, which could be swiftly lowered, with flame throwers and howitzers for close range work against the German batteries on the mole, and Stokes guns. Two Mersey ferry boats, Iris and Daffodil, were similarly equipped, and two submarines, C 1 and C 3, were loaded with high explosives in the bows, ready to be run in under the railway viaduct of the mole. As has been said already, the attack on the mole was to be in the nature of a diversion to distract the attention of the enemy while the blockships steamed into position. At Ostend the plan was simpler. There was to be no diversion, the blockships were simply to steam into position under cover of the artificial fog and sink themselves in arranged positions in the mouth of the channel.

To ensure the success of the expedition, a carefully prepared time-table was arranged. The exact moment at which each vessel was to take up its position was carefully worked out, the precise time for the demolition of the railway viaduct was specified, and a hundred and one other details were attended to, all combining to make the great attack as sure of success as possible. But there were other conditions outside human control which would have to be just right. Firstly it was essential that the night should be dark. The tide would have to be high at such a time as would enable the attackers to approach and return under cover of darkness, and the wind would have to be blowing gently in the direction of the enemy coast so as to allow the smoke screens to drift towards the shore, thus covering the approach. However carefully the plans were laid, they could not provide for weather conditions, so for these it was necessary to wait. This period of waiting was a severe strain on the men involved, but they passed the time in rehearsing and training for the great day.

At last all was ready. The weather seemed just right, the time of the tide on the other side of the Channel was suitable, and the wind was blowing in the right direction. On April 11, 1918, the force set out, and the attacking ships, numbering 74 in all, joined Admiral Keyes' flag off the Goodwin sands. The Vindictive had the Daffodil and Iris in tow, as their range was too short to make the double journey under their own steam, whilst other vessels towed some of the smaller craft, such as coastal motor-boats, the attacking submarines, and the like, required for work on the enemy coast.

Whilst this force was moving slowly across the North Sea the 65th wing of the Royal Air Force left Dunkirk and carried out the preliminary bombardment. Shortly after midnight the naval force stopped to disembark the spare crews of the blockships. At this period the force was only 16 miles from the Zeebrugge mole, but fate had decided that no attack was to take place that night. No sooner had they resumed than the wind, which had been blowing lightly towards the enemy coast, died down and then began to blow in the opposite direction. It was an extremely difficult position for the admiral in command—everything was ideal except the wind, and he had no alternative but to recall his force and return. It was a bitter blow to all concerned, but they took it well and settled down to await another opportunity. This came three days later, and once more the force set out, but again it was ordered back owing to a rising wind and sea.

Again there ensued a trying period of waiting. At last, on April 22, the conditions conformed once more with requirements, and the little armada prepared to set out. The first vessel to leave was the Erebus (Captain C. S. Wills) which was accompanied by the monitors designed to bombard the Zeebrugge batteries. The monitors for the preliminary bombardment on Ostend left Dunkirk at 8.35 p.m., and a force of 23 vessels, under the command of Sir Reginald Tyrwhitt, left Harwich to guard against a surprise attack from the enemy by sea.

The entire concentration of the force had been made in daylight, and as the ships steamed to their goals Admiral Keyes made the signal "St. George for England," a reminder that the operations were due to begin on St. George's Day (April 23). After reaching a point about 20 miles from Zeebrugge the expedition stopped for a short time for the triple purpose of disembarking the surplus blockship crews, ascertaining the exact direction

of the wind, and casting off the submarines and smaller craft which had been in tow. Soon after restarting, a slight drizzle set in, considerably reducing visibility. The result of this was that the preliminary bombardment was slightly delayed, and the aerial bombardment was perforce dispensed with. It was at this time that the Ostend blockships and their attendant craft parted company with the Zeebrugge expedition and steered for the Stroom Bank buoy. By this time the expedition was within 15 miles of the mole.

Soon the monitors had reached their respective bombarding positions. At 11.10 p.m. the Ostend monitors began their operations, to be followed by the Zeebrugge monitors about 20 minutes later. The situation now was becoming tense. The blockships slowed down to allow the Vindictive, Iris and Daffodil to get ahead and launch their surprise attack, during which time the fast coastal motor-boats were busy laying a thick fog. The Vindictive was now in the mined area ; but, regardless of this, she worked up to full speed in order to make a dash for the mole, along the outer side of which she was to moor and land her attacking forces. When she was within a few hundred yards of her objective the wind changed, and she emerged from the protecting smoke screen to find herself within point-blank range of the batteries on the mole extension. These at once opened fire.

In his book on the bombardment of Zeebrugge, Captain A. F. B. Carpenter, commander of the Vindictive, estimates the distance at which his vessel passed the mole battery at 250 yards off the eastern gun, which, he says, gradually lessened to 50 yards as the western gun was passed. He continues:

> The noise was terrific, and the flashes of the mole guns seemed to be within arm's length. Of course, it was to all intents and purposes impossible for the mole guns to miss their target. They literally poured projectiles into us. In about five minutes we had reached the mole, but not before the ship had suffered a great amount of damage both in matériel and personnel.

The damage to the vessel during this short and exciting dash was considerable. The landing gangways had been badly smashed, only four being left intact. The most serious loss, however, was to the personnel. A few minutes after the Vindictive emerged from the smoke screen, Captain H. C. Halahan, who was in charge of the seamen's landing parties, Lieutenant Colonel B. H. Elliott, commanding the storming

parties of marines, and Major A. A. Cordner, his second in command, were all killed. The damage to the gun crews, too, was very serious, the howitzer crews being nearly all killed. Captain Carpenter, however, managed to take his ship alongside, although he was unable to lay her along the mole batteries as arranged. He did, however, place her about 300 yards beyond, and she finally came to rest at one minute past 12, a minute after her scheduled time.

When the Vindictive was brought to a standstill great difficulty was experienced in keeping her alongside the mole. The fast running current caused her to swing out, thus preventing the gangways from reaching the top of the mole. Captain Carpenter, therefore, signalled to the Daffodil to butt her hull in, and, putting her bow against the side of the Vindictive, this little vessel, with her engines running full ahead, held the larger ship close to the mole. Several efforts were made to get the grapples on to the top of the mole, but they all failed, and the Daffodil continued to push the Vindictive throughout the whole of the operations. She managed, too, to land her own storming parties on the mole by way of the Vindictive. The Iris, meanwhile, took up her position ahead of the Vindictive.

The Vindictive's intact gangways were now dropped and the order to land was given, but the ship rolled and bumped, lifting the gangways high above the mole one moment, and crashing them down on to it the next. But, nothing daunted, the landing parties dashed up them, carrying with them machine guns, flame throwers, bombs and all the other instruments of destruction. Grievous loss was suffered and magnificent heroism was displayed in this landing. The very dying cheered the men up those plankways of death. Lieutenant H. T. C. Walker, with one arm shot off, shouted "Good luck!" to the procession as it passed over him. Thrice the fore-howitzer in the Vindictive was manned as gun crews were mown down. The foretop was struck early, and all in it killed or wounded; but Sergeant Finch, of the Marine Artillery, himself badly wounded, kept up a fire.

The Daffodil nobly performed her duty of holding in the Vindictive against the mole, and in doing this maintained twice the normal pressure in her boilers. Sheltered by the Vindictive she did not suffer severely, but her commander, Lieutenant H. Campbell, was wounded. The Iris was the target of a great concentration of German guns. Her grapnels would

not hold or span the parapet. Lieutenant Commander Bradford and Lieutenant C. E. V. Hawkings climbed from her to the parapet and sat on it under fire endeavouring to hold the grapnels fast. Both these heroic officers were shot down; they reeled and fell between the mole and the ship. The ship's bridge was struck; her captain, Commander V. F. Gibbs, was mortally wounded, and Lieutenant Spencer, who was navigating her, was also severely wounded, but remained conning the ship from a fragment of the bridge that was left. Two large shells caused fearful loss. One came through the upper deck, accounting for every man in a party of 56 marines who were waiting to go ashore. The other killed or wounded 30 men in the sick-bay. Her position became so critical that she was ordered to shift her berth to a point astern of the Vindictive where there was more shelter. When she crawled out, a battered wreck, it was with 77 dead and 105 wounded on board.

On the mole a fierce struggle was in progress as the British surged forward with bombs and flame throwers to destroy the sheds and buildings and the battery of German guns at its seaward end. Another party pushed landwards to a point where barbed wire crossed the broad roadway, with machine guns mounted beyond it, and swept through this obstruction. The motor-boats, finding a German destroyer lying alongside the mole, attacked it, causing a violent explosion.

While the fight was at its height a brilliant glare was seen near the shore. Submarine C 3, commanded by Lieutenant Richard D. Sandford, had reached its destination under the viaduct and had been blown up. So great was the noise of the battle that was raging that no explosion was heard, only the red glare in the sky showed that Sandford had done his work well and truly. By a miracle the two officers and four men on the submarine escaped, as they were picked up and placed on board the destroyer Phoebe. The other submarine, C 1, had been so much delayed by the parting of a cable that she had been unable to play her part in the operation.

While the fighting raged on the mole, engaging all the enemy attention, the blockships, the Thetis leading, were cautiously approaching. At 20 minutes past midnight they sighted the mole in the glare of rockets fired by the Vindictive. After rounding the mole the Thetis increased to full speed, but was sighted by the Germans and subjected to heavy fire.

Nothing daunted, she rammed her way through the numerous obstructions which guarded the entrance to the canal, but unfortunately one of her propellers fouled a net and she became unmanageable. She ran aground, was hit repeatedly, and began to sink in the channel. To complete her destruction the charges in her were fired, but not until valuable instructions had been signalled to the blockships which followed her.

The Intrepid, under Lieutenant S. Bonham-Carter, came next. Working all her guns, she passed between the breakwaters at the canal entrance, and swinging round right across so as to block it, she was skilfully sunk. Lieutenant Bonham-Carter escaped with difficulty on a float, and the crew in two cutters and a skiff. The Iphigenia brought up the rear. Steaming into a dense cloud of smoke, she rammed and sank a dredger and caught a barge across her bow; then she, too, entered the canal and was cleverly sunk across it by her captain, Lieutenant E. W. Billyard-Leake, thus effectually sealing it. The gallant crews of these two ships escaped, some in a motor-launch which stood in under a terrific fire, others in their own boats. The object of the raid had been attained. Zeebrugge was sealed up, and it now remained to withdraw the ships which had grappled the mole, if it were possible to do so. The Daffodil's siren was sounded repeatedly as the signal of recall.

For 20 minutes with admirable staunchness Captain Carpenter remained, till it was reported that no one was left who was capable of staggering to the ship. Then came some minutes of extreme peril. The mole had protected the hulls of the ships, but as they drew clear of it a veritable tornado of shells lashed the water about them, until in the dense fog of the smoke screen all three vanished, the Vindictive bearing with her a quarter of a ton of masonry which fell on board from the mole. For the splendid conduct of all her crew she was honoured with a signal by Vice Admiral Keyes, " Well done, Vindictive ! "

At Ostend the operations were conducted by Commodore Hubert Lynes with equal gallantry, but with less success, because of an unlucky touch of wind which at the critical moment blew the smoke screen aside, and because the Germans had moved the buoy which marked the channel to the entrance. The blockships Sirius and Brilliant could not reach the entrance to the harbour; they were blown up some little distance from it, and their crews were withdrawn in motor-launches and boats.

The total loss was 188 officers and men killed or mortally wounded and 384 wounded, while only 16 were missing. Those engaged received the special congratulations of the king, who stated : "The splendid gallantry displayed by all under exceptionally hazardous circumstances fills me with pride and admiration." The Admiralty recorded its high admiration of the perfect cooperation displayed, and of the singleminded determination of all to achieve their object. The disciplined daring and singular contempt of death places this exploit high in the annals of the Royal Navy and Royal Marines, and will be a proud memory for the relatives of those who fell.

The Germans professed that the entrance to Zeebrugge was not closed, and their statement had this much of truth in it : the channel was not entirely closed, but the passage left on the western side of the blockships was exceedingly narrow, and only navigable by small ships and submarines at times of high water. Still the splendour and daring of the exploit remained.

Admiral Keyes speedily showed that persistence in attack was his settled policy. On the night of May 9-10 he directed another gallant attempt to complete the blocking of Ostend. On this occasion the Vindictive was used as the blockship, and several hundred tons of concrete were run into her hull. Commodore Hubert Lynes planned and executed the operations with which it was hoped to take the Germans by surprise. Aircraft and monitors were to cooperate, and the heavy British artillery in Flanders was to direct counter-battery work on the German guns. The night of the 9th seemed all that could be desired—windless and moonless, with no visible sign of fog. The Vindictive stood in, handled by Commander A. E. Godsal. She was preceded by destroyers and motor craft which were to spread a smoke screen and place a flarelight for her to steer by. As she passed into the darkness the monitors bombarded, the aircraft hovering above the town released their bombs, and the British guns on the Flanders front opened fire.

At this critical moment misfortune once more befell the attempt. Wet sea fog suddenly came up, hiding everything. For several minutes the Vindictive groped in this for the entrance, then a puff of wind lifted the fog and showed the piers ; a motor-boat laid a flare between them, and the vessel pushed in under a terrific fire. Commander Godsal laid her nose against the eastern pier and prepared to swing her hull across the channel when

came a second mishap. A shell struck the conning-tower, outside which he was standing, and killed him instantly. Lieutenant V. A. Crutchley, inside the tower, tried in vain to bring the ship round; she was hard and fast, and would not be moved. Here, as before at Zeebrugge, there was a strict time-table to be followed, and he could not wait. He therefore ordered the charges in the hull to be fired and the vessel to be abandoned, and this order was skilfully carried out.

The rescue launches now came fearlessly alongside to take off survivors, and began their hazardous retreat under a concentrated fire. One, on the verge of sinking with her load of wounded, was picked up by Admiral Keyes in the Warwick which, a few minutes later, was herself disabled by a mine. The other launch, equally crowded, with 55 holes in her hull, reached the Prince Eugene in the morning watch.

The total loss in this affair was eight officers and men killed, 10 officers and men missing, and 29 officers and men wounded—a total of only 47. The entrance to Ostend was not completely blocked, and the Germans a few days later managed to clear a channel through which destroyers and submarines could pass, though not without some difficulty. Sir Roger Keyes and the officers and men concerned received the warm thanks of the War Cabinet for their gallant work. As welcome were the tributes of praise which poured in from the Allies, who marked with enthusiasm the persistent offensive of the British navy.

As has already been said, these two great operations against the Flanders ports were undertaken primarily against the German submarine campaign, and by their effect upon this campaign they must be judged. According to the official "History of the War," about two submarines were entering or leaving the Flanders bases every day prior to the blockading operations. During the week after the operation these figures were maintained, for 11 submarines went to sea or returned between April 24 and the end of the month. During May 56 submarines came and went, and it was not until June that any decrease was noted, only 33 submarines using these ports during that month. During the summer of 1918 the number of submarines working from the Belgian ports dropped even more, but, says the official history, "this was because the German submarine commanders were reporting that the passage of the Straits of Dover was becoming increasingly difficult and hazardous."

Whatever the blockading results, however, there can be no denial of the fact that the operations were far from unsuccessful. They were carried out at a time of great national anxiety, for it was during this time that the German armies were pressing forward in a final effort to break through the Allied defences. The news of a successful blockading operation against two seemingly impregnable ports did much to keep up the spirits of the British people and the army on the field.

To the world at large, these attacks in the face of such odds showed that the British navy was still the greatest naval power in the world, and that the traditions of her Drakes, her Grenvilles and her Nelsons had been carried on. The British navy had covered itself with glory and added another chapter to its great record of valiant deeds.

CHAPTER 7

Third Battle of the Aisne

After using considerably more than half of his forces on the western front in attacking the southern British wing on the Somme in March and the northern British wing on the Lys in April, 1918, General von Ludendorff began to devote all his attention to the French centre, in an effort to exhaust the strategic French reserve. Great Britain, it was admitted, had survived the ordeal imposed upon her. She had raised the age of military service, "combed out" even vital industries such as coal-mining, and so brought the infantry forces of Sir Douglas Haig fairly up to strength. Even so, the strain upon British man-power in May, 1918, remained terrible. Ludendorff was able to retire his best shock divisions for nearly two months' rest, while bringing them up to strength and training the new drafts. The best forces of General von Hutier were withdrawn towards Hirson and Mézières for repose, varied by exercise in improved tactics of attack.

On the other hand, all the Allied commander-in-chief could do for the British divisions was to endeavour to find easy sectors for them to hold. Some of the most tried of British divisions, when relieved along the Lys river, were moved down to the

Aisne by Craonne, Berry-au-Bac, and the neighbourhood of Reims, to fill out the French line. Alongside these worn British forces were placed French and French Colonial divisions that had likewise borne the burden of great battles.

The Aisne positions were chosen as a place of rest, because of their apparent impregnability. The line ran from Pinon forest in the Ailette valley, which was covered by a system of block-houses and dominated by guns around the hog's back of the Chemin des Dames. This line was held by a veteran force of Normans, Vendéans and Bretons. Then towards the end of the Chemin des Dames, the famous California plateau, for which Germans and Frenchmen had fought for months, was occupied by the British 50th division of north-country Territorials, distinguished by their long stand by Dead Man Down, below Arras, at the end of March, 1918, and by their superb defence of the river Lys line immediately after the Portuguese division was broken on April 9.

The new line of the 50th division extended to Craonne and the summit of the great Aisne plateau, and connected with the sector of the British 8th division, also hardly tried in the northern battle, and now extended by Berry-au-Bac. On their right was the heroic British 21st division that had fought from Epéhy to Bray, on the Somme, while wasting away to less than a brigade. The line of the 21st division ended about Berméricourt, where it linked with the sector of a French Colonial division that had also recently fought to exhaustion. Immediately in support of the British forces was the 25th division, which had lately fought from Ploegsteert to the slope of Kemmel hill, staying the Germans at last by square formation. The British 19th division, distinguished in the Cambrai road actions and the Lys battles, was available as a second reserve.

As soon as these tired forces were settled along and below the Aisne plateau, Ludendorff placed his main reserve above Laon, threatening equally the Champagne front, the Aisne line, and the Oise and Somme lines. It was expected that he would either strike against General Gouraud, commanding in Champagne, or again swing westward upon General Humbert or General Debeney and General Rawlinson on the Amiens front.

In the last week of May, however, it became known that the Ailette and Aisne sectors would be assailed. So difficult was the hilly country between the Aisne and the Marne, with its long

slopes, lateral rivers, and restored towns, villages and farmsteads, that it seemed impossible for the German commander to think of reaching Paris by the road along which Kluck had returned. Yet this was the bold scheme of Ludendorff. He had in line along the Aisne 17 divisions under General von Böhn and General Fritz von Below. He greatly strengthened their artillery, and under cover of night rushed down 15 of the best shock battalions that had fought under General von Hutier. Close behind these picked troops came eight more German divisions, ready to enter into action when the shock troops had pierced the Allied line and needed to be withdrawn before their aggressive spirit was broken. Only three British divisions and two French divisions, stationed on a front of 25 miles between Vauxaillon and Berméricourt, were available to meet the first thrust. Even when the British 25th division and a crack French division in reserve entered into action the odds against the Allies were five to one.

The struggle opened at one o'clock in the morning of Monday, May 27. A German artillery barrage two miles deep rolled over the chalk heights and down the misty valleys, filling the caves, quarries, works and buildings with poison gas. The bombardment lasted some four hours, and when it was at its height, and trench mortars and other infantry guns were smashing up the foreground works, a large number of special batteries began to fire smoke shells upon the Franco-British front. Not only were many of the defence forces curtained off from each other, but the infantry was so veiled from its own artillery that signal rockets could not be perceived by the gunners.

Stealthily, patrols of German machine gunners and sharpshooters began to work through the covering defences of the Allies. In the French block-houses in Pinon forest three French battalions were encircled. Heroically the troops held out, fighting for two days, and occasionally getting carrier pigeons through to the receding Allied line. Practically these Frenchmen were volunteers for death, aware that their works would be overrun and cut off, but resolute to fight to the end a delaying action or to hold the enemy until a counter-attack relieved them.

In the meantime the heroes of Pinon forest, by holding the outer block-houses, prevented the German advance from spreading immediately towards the Soissons sector. But in the middle Ailette valley the French defence was broken, and by eight o'clock some of the German shock battalions had reached the

Aisne, by Pont Arcy, on the road to Fismes. The attacking troops had to climb the long, high, northern slopes of the Chemin des Dames ridge, and then fight downward over cavernèd and excavated ground, where there were grottoes capable of sheltering thousands of men. Yet the Germans worked forward at a pace of more than a mile an hour, through one of the mightiest natural fortresses in Europe.

The ease of the German advance from the Ailette to the Aisne was in no way due to weakness on the part of the French division. The Normans and Bretons fought to the riverside with desperate valour, and there, reduced to the strength of a brigade, they swung back sideways to the plateau south-east of Soissons, and held out for six days in all against continually increasing forces. Their stand below Soissons was one of the decisive events in the war. The ground they defended, on the flank of the extending hostile advance, became the grand pivoting point for the first great French counter-offensive when the time came for General Foch to take the initiative.

But in the early morning of May 27 the retirement of the French division from the centre of the Chemin des Dames exposed the men of the 50th division to a terrible ordeal. The Durhams, Northumberlands and other veteran Territorials had stood firm against all the enemy's rush attacks from the California plateau to the village and summit of the historic Craonne peninsula. German machine gunners and sharpshooting patrols could find no gap in the bombarded and gas-drenched English line, and the Germans were compelled to resort to their old method of mass assault in dense waves, with tanks in close support, and creeping barrages.

The Englishmen did not waver against the frontal attacks. When, however, the French retired on the left by Troyon, and the Germans worked round the back of the connecting English brigade, a rapid retreat had to be conducted. The British general endeavoured to relieve the pressure on the French force by making a counter charge against the advancing centre of the German line. But von Böhn, with tanks, checked the assault on his centre, while developing along the path of the French retreat his outflanking movement against the 50th division.

On the right of the north-country troops, however, the offensive conducted by Fritz von Below around Reims was as unsuccessful as had been the offensive conducted by Otto von

Below around Arras. The Franco-British artillery observers were quick in detecting unusual signs of activity in the German lines on the evening of May 26. During the night they heavily bombarded the hostile organizations. Then, during the German artillery preparation, the French and British guns, between Reims and the hills by Berry-au-Bac, strongly answered the German batteries. The upshot was that Fritz von Below's shock divisions were held up and shattered by French Colonials and by British troops of the 21st and 8th divisions, which contained many young soldiers who came into action for the first time.

When the flank of the 50th division was turned below Craonne, and the north-countrymen had to retire across the Aisne towards the ridge of Guyencourt, between the Aisne-Marne canal and the Vesle stream, a difficult manœuvre had to be executed against overwhelming numbers. The Franco-British Reims line, that stretched north of the city, had to be moved back to the north-west and thence bent south-west, to keep contact with the French forces retreating towards the Marne. Both von Below's and von Böhn's shock divisions made sustained and violent efforts to break through the Allied line during the great manœuvre.

The French left, by Vailly, was saved by the fine division immediately in reserve, which arrived at Pont Arcy while the Franco-British forces were still struggling on the northern river bank. By heroic counter-attacks the fresh division, often fighting at close quarters with Germans six times their number, held the hostile masses and prevented them from spreading out along the southern line. Thrice the Germans crossed the river, but the French held out until midnight, and allowed time for their countrymen to swing back by Vailly. But at Pontavert, the critical point on the left British flank, the gallant French counter-attacking force, extended beyond its strength, could not save the situation. The enemy worked over the river, and again began to encircle the 50th division. At Gernicourt Wood there was then a memorable rearguard action. Some of the youngest English troops made a stand alongside some of the oldest French Territorials, who were merely a labouring party. Boys of 18 and men of 50, they fought to the death ; all the English troops fell, and only a few of the Frenchmen escaped.

During the arduous task of recrossing the Aisne the brigades of the 50th division were for a time cut off from the French force on their left and the 8th division on their right. But the 25th

Imperial War Museum

AFTER THE SPECTACULAR RAID. The battered cruiser Vindictive is shown in port after her action, with the ferry boats Iris and Daffodil, against the Zeebrugge mole, where she landed a force to divert the enemy's attention from the real purpose. On May 10, 1918, she was run into Ostend harbour and sunk to block the channels against German submarines. Vindictive lay there until raised in August, 1920, in which year she was presented to Belgium.

THE KING WITH A ZEEBRUGGE HERO. His Majesty is seen in Chatham Naval Hospital at the bedside of Able-Seaman Douglas Grey, of the Vindictive, who was wounded at Zeebrugge. King George throughout the war visited hospitals and chatted with the wounded.

Imperial War Museum

GERMAN TROOPS ON THE CAPTURED CHEMIN DES DAMES. This road, that gives its name to the summit of the Craonne plateau on the heights of the Aisne, for the conquest of which the French shed so much blood in 1917, was recaptured by the Germans in their great "push" of May, 1918. A column of German reinforcements is seen moving up the famous road, in the early days of June, to their advanced trenches.

FRENCH HEROES OF THE AISNE. General Gouraud reviewing French cavalry who had displayed conspicuous valour in defeating the great German offensive on the west of Reims in the 3rd battle of the Aisne, which lasted from May 27 to June 18, 1918. The German aim, to inflict a decisive defeat on the French army, was not attained, though much ground had to be yielded by the French.

division came finely up in support, while an English cyclist battalion reinforced the French centre by a splendid action at Fismes, on the Vesle. The main British forces swung steadily back on the St. Thierry ridge, and with the river valley of the Vesle in their rear, giving the enemy a way of approach behind them, made a glorious resistance on the outskirts of Reims. Reims itself was really impregnable. Its immense system of wine vaults and new tunnels driven through the chalk, its wired and barricaded streets, sandbagged and loopholed houses, with the crescent of observation heights curving above the city, and the Mountain of Reims, a large forested clump of nine hills, rising behind, composed a stronger military obstacle than the caverned and buttressed high cliffs of the Aisne had proved.

On the westerly outskirts of Reims the British forces gained an important victory alongside the French. The British formed the moving wheel of the defence and the Frenchmen the axle. The Frenchmen stood firm between Thillois and Pompelle fort, and, after a fine counter-attack northward to lighten the general pressure, ended their action by capturing four German tanks, destroying five more, and taking prisoner the enemy troops that entered Pompelle works. The British divisions—with a constantly endangered left flank, which the Germans attempted to turn every time the French centre gave ground between Fère-en-Tardenois and Verneuil—fought and manœuvred on the high ground between the Vesle and Ardre streams. To strengthen the French centre the British force extended across the Ardre, and held the hills above Ville-en-Tardenois, winning time for Foch to bring his reserves into action by the beginning of June.

The strain upon the British troops, who were not reinforced by their 19th division until May 29, was intense. Each German battalion now had 16 machine guns in company groups, and an additional 12 guns that went to form a special brigade machine gun corps. Each brigade also had three companies of infantry guns. The companies worked forward in line, with one company in support, and the machine gunners covered the ground in front of the skirmishing patrols with a sheet of lead. When working forward in ordinary circumstances the line of scouts was protected by linked machine gun fire that swept the onward path. The brigade machine gunners held the places against which counter-attacks might be expected, or concentrated upon obstacles it was intended to rush.

Personal bravery alone could accomplish little of importance against this flexible and mighty instrument of fire-power. The highest skill and instinct for team work in the individual soldier, as well as in the regimental and staff officers, was required by the defending forces in order to cope with the superior numbers of attackers. The German machine gunners needed more frequently to be mastered by aimed rapid rifle fire than had been the case by the Somme and the Lys. Yet many of the veterans of the recent battles were either dead or wounded, and their places were filled by untried youths. Nevertheless, qualities of race told. Marksmanship was an affair of visual gift. Either the Briton acquired this visual gift by the practice of games, or his zest for cricket and football was created by some quick, native play of limbs, eyes and brain. The baseball-playing American had the same visual gift. When he became well acquainted with his rifle, what he could see he could shoot.

Thus it came about that the apparently weakest divisions in the British army proved of formidable strength. They held on to the Ardre line on May 30, when the Germans had reached the Marne, beating back day and night the increasing masses of the foe, whose corps commanders had soon to abandon machine gun penetration and resort to the shock of infantry masses. Still the British line guarding the critical flank of the Mountain of Reims—on which depended the French army of Champagne and, less directly, both Paris and Verdun—held against all attacks, while slowly wheeling back to conform with the continuing recession of the French centre.

On May 31 the point of the German wedge flattened and spread eastward along the Marne to Verneuil, giving scope for an attack on the Mountain of Reims. Guns were brought forward, and on June 2 there opened a fierce struggle, between Reims and Verneuil, for the approaches to the mountain. The Germans were then some 12 miles south of the line held by the army of Champagne, and some 15 miles south of the Reims salient. Between them and the rear of General Pétain's main forces was the Mountain of Reims. Between them and the mountain were the survivors of the British divisions. many of whom had been fighting for 11 days and nights The fresher French forces were not sufficiently numerous to hold the line.

The German commander attacked the French to prevent them reinforcing the British, and then launched his divisions of assault.

The Allies gave ground, counter-charged, fell back again, and again surged forward. The line held. At the end of four days the remnants of the German division were re-formed and employed to prepare the way for a grand attack by fresh troops. The hill of Bligny, rising 600 feet and commanding the course of the Ardre, was required by the German commander before he loosed his new forces. The Cheshires, after repulsing the first waves, were compelled to retire. They returned with the Shropshires, however, and in a bayonet charge cleared the hill, opening ground by which the Staffordshires, forming the right of the gallant 19th division, were able to recover Bligny village.

This fine success proved decisive in regard to the position on the eastern side of the new Marne salient. General von Böhn did not continue his attempts against the Mountain of Reims, but for more than a month attacked westward and northward in the hope of finding it easier to enlarge the salient in other directions. Throughout the first phase of the battle the position of the French centre, retiring to the river, was extraordinary. When the British divisions swung back and round Reims, and the French force withdrew on the plateau below Soissons, only a hard-pressed covering line of a few thousand French troops, with less than 1,000 British cyclists, connected the Allied wings, across some 20 miles of notched ridges, through which the enemy were continually pushing in strength of 100,000 men.

The situation was calculated to test to the uttermost the character and qualities of General Foch. The French people at first could not believe that their own crack regiments had broken on the Chemin des Dames, and attributed the disaster to the war-worn British divisions. Enemy agents endeavoured to create bad feeling in the French against the British, using the false rumour with a view to provoking disorders similar to those which had occurred during the struggle along the Aisne in the spring of 1917. Both from a military and a political point of view the outlook seemed grave. Once more Paris had to be organized for active defence. Measures were taken to safeguard, by removal, industries of vital importance, and place in security women, children, and old people already tried by long-distance bombardment, and Clemenceau's bitterest opponents, the Socialist deputies, began to rally to the committee of defence.

As Foch's reserves arrived in strength he left a mere covering force along his broken centre, allowing the Germans to reach the

Marne on May 30. Thereby he gave up the main railway line connecting Paris directly with the army of Champagne, together with large quantities of shell and material stored in the Tardenois region north of the Marne. General Gouraud, commanding in Champagne, had to be served with fleets of motor-lorries, and the railway that fed and munitioned Verdun was strained in maintaining an increased volume of supplies. The Allied commander-in-chief was obliged to remain weak somewhere. He elected to fight with all power on his wings, and when the pressure of his troops there became strong, General von Böhn responded to it, and in turn neglected the central Marne front. Not until June 6 did the Germans attempt to force the passage of the river, and only a movement of reconnaissance was made by the men of a battalion, who were counter-attacked by French and American troops and driven back to the northern bank.

The Allied scheme of defence was based upon the Mountain of Reims on the east and the forest of Villers-Cotterets on the west, Compiègne forest connecting the Villers-Cotterets positions with the woods below the Oise river line. In leafy spring-time the great western system of woodlands was the most perfect of military positions for attack or defence. The forest trees and brushwood formed the best machine-gun positions, being easy to wire and naturally screened. Light covering forces could thus cushion the shock of charging masses and win time for the full power of the defence to act. Then, under the vast tent of foliage, armies could collect and appear in unexpected places, in spite of the activity of hostile reconnoitring aircraft.

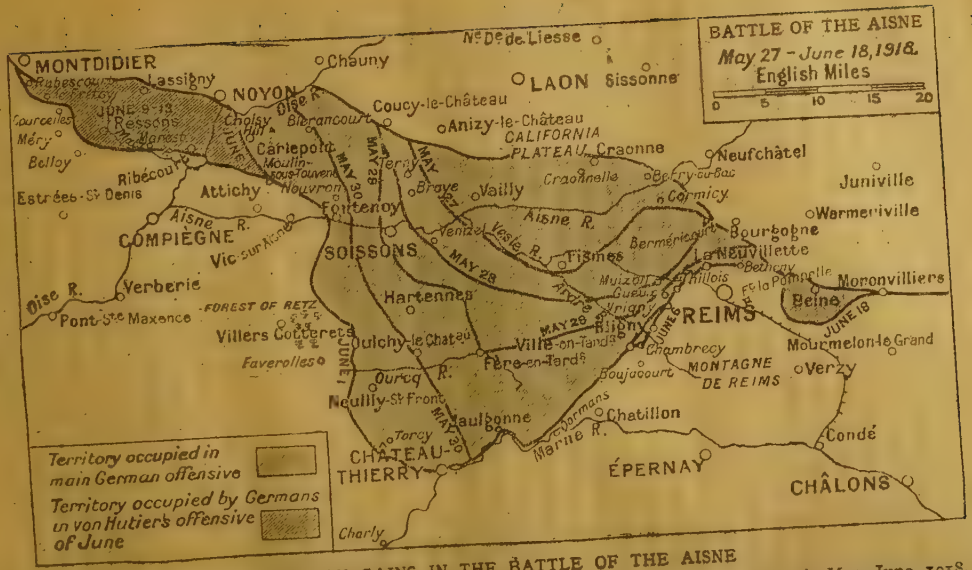
The Germans at first had everything their own way in the air. In the first prolonged storming movement their shock divisions reached the Allied aerodromes and disorganized the local aerial service. Meanwhile, the unopposed, massed squadrons of flying Germans, collected from the entire western front, made life a nightmare for the retreating Franco-British troops. All day foot, guns, horse, supply trains, and railway communications were machine-gunned and bombed, and every manœuvre of defence was detected. Night brought little relief. More German machines arrived, with a new device of a clockwork flare parachute, that illumined a wide circle of ground for two minutes, while the attacking and observing aeroplanes droned invisible against the clouded sky. The great depth of country which the French had to abandon, ridge after ridge, in their first

retreat since September, 1914, was largely lost owing to the superiority of the enemy in the air as well as on the ground.

German aerial predominance, however, was merely a transient, local matter. British and American pilots flew to the rescue, arriving with the large main forces of the French air service. Although by this time the German infantry and artillery had won many woods as cover, the ways of communication were much restricted. By bombing pontoons and stronger bridges, and swiftly carrying the Allied counter-offensive in the air to the railway bases of the armies of assault, the Franco-British-American squadrons did much to check both the advance of the invader and his efforts to widen the sides of the Marne salient.

Between Soissons and Château-Thierry the struggle was more severe than it was on the Reims and Ardre line. Ludendorff, after the defeat of Fritz von Below, gave the latter little further help from the grand reserve, but sent his fresh divisions to General von Böhn, who spent most of them around Soissons. On May 28, by a series of fierce, costly actions, he won the high, broken ground at Condé, Vregny and Terny, and, closing from the north and east, in the night, on the old city of many battles, captured it, in ferocious street fighting, on May 29. The French recovered it by a magnificent counter-attack, against apparently overwhelming numbers. But Böhn wanted Soissons at any price, and, launching a great Brandenburg force, solidly occupied it. There then followed a long sway of attack and counter-attack down the Soissons-Château-Thierry road, with the original French garrison of the Ailette line holding on to the hills immediately below the lost city, and strong reserves working eastward, while the diminishing troops of the cavalry division that had saved the line below the southern bank of the Aisne fought down to the Marne.

Even these last troops were in good heart, although General Foch was placing upon them the heaviest burden of the battle. Some of the men almost quarrelled for the right to sacrifice themselves in machine gun rearguard actions. Others carried on when badly wounded, until they dropped from loss of blood and fatigue, bringing up ammunition after being disabled for fighting. The men did not, of course, understand why few reserves arrived in their sector, but in cold, personal anger they fought against incessant mechanical pressure, using every art of fence, especially at Château-Thierry, the historic riverside town through



GERMAN GAINS IN THE BATTLE OF THE AISNE

Map showing the territory occupied by the Germans in their great offensive on the Aisne in May–June, 1918. The result of this battle was to carry the German front to a point only 40 miles from Paris.

which the heroes of Mons had swept when they turned in pursuit of the German 1st army. American machine gunners, ably helping by the Marne, marvelled at the French soldier.

On May 30 came a French counter-attack that enabled Foch to hold on to the straight eastern highway between the Aisne and the Marne. Ludendorff answered by extending his front of battle 15 miles, and launching another army northward from the Aisne to the Oise. His movement, however, had been expected, and the northern French force had already begun to wheel back towards the Carlepont Wood just below Noyon and Choisy hill, by the wooded outskirts of Laigue forest, from which the new line ran, over hilly ground, towards the great Villers-Cotterets forest. By shortening his northern sector, between the Oise and the Aisne, General Foch saved men.

While he was carrying out this operation the struggle increased in fury. Fresh French forces made a superb leap forward between Soissons and Château-Thierry, driving the Germans over the Crise stream and up the Ourcq on May 31. Ludendorff poured out more men, until there were 50 divisions in action against the Franco-British-American forces. After trying to hold the Allies, by fierce, narrow thrusts from Noyon to Reims, the German commander on June 2 delivered the blow intended to shatter the defence. He struck at Carlepont Wood and failed there. He took Choisy hill and lost it five times, leaving the French Colonials still holding this important key position. At the same time he sent his troops storming into Château-Thierry, and battered once more upon the British and French line by the Mountain of Reims.

All these actions, although heavy and sustained, were designed to hold and test the forces that Foch had generally disposed along the front of battle. The Germans' grand blow was directed against the Villers-Cotterets forest. It was anticipated. The French commander made all possible use of the foreground villages, such as Faverolles and Longport, shredding the enemy masses by artillery barrages and machine gun fire, and then launching quick infantry counter-assaults under cover of closely directed light gun fire. The villages were recovered, and lost again at night. In the darkness the Germans hoped to equalize the conditions of attack and defence in forest fighting, and, bringing up at evening the last of their immediately available unused divisions, they entered for the second time in the

campaign the deadly maze of Villers-Cotterets woodland and were trapped in it. The French returned to the covering line of machine gun positions, accompanied southward by a United States force of fine quality that strenuously worked forward from Veuilly Wood towards Château-Thierry.

When the first phase of the battle ended the best part of half a million of picked German soldiers was enclosed in the Marne salient, with flanks more than 30 miles in length, and a centre from which it meant disaster to attempt to advance. Only one shattered railway, under assailing gun fire, ran through the rough terrain, and the roads were few, the best being liable to be lost in a strong counter-offensive, as it was immediately in the German battle zone. Ludendorff was pre-eminent in the art of making awkward salients for his army commanders. Not content with the two he possessed by Amiens and Hazebrouck, he had made a third—and weakest—along the Marne. One by one his illusions were falling from him. He had tested severely the young recruits of the British "home army," and found them full of the mettle of their race. He had also had a strong foretaste of the qualities of the armed manhood of the United States, which was rapidly building up an army of a million effectives in France, with little interruption from submarine attack. His exposed flanks, in unorganized country, beneath the Mountain of Reims and along Villers-Cotterets forest, taught him once again that General Foch was a master of strategy.

The only way in which the German commander could save his flanks was to continue to attack. He had to set a battle in movement on another front before the Allied commander could gather men and material for a counter-offensive. Amiens no longer tempted him. He reckoned that Foch had made a grave mistake in sending French forces to help the British armies, and that he could yet break through the French front: So long as his numbers and organization for offensives in series enabled him to retain the initiative, he was, he thought, secure against the dangers he ran round every salient he made. He could not, however, leave the Marne salient as it remained. Being compelled for his own safety to strike either immediately east or to the west of his line of advance from the Aisne, he arranged to thrust in both directions alternately.

Then it was, after months of patient resistance, that the Allied commander-in-chief began to display the active side of his genius.

Marshal Foch left Generals Debeney and Humbert, along the Amiens salient, to prepare, under Sir Douglas Haig, to take advantage of the German weakness on the western line as soon as occasion arose. In the south a new army commander appeared in General Mangin, one of General Pétain's lieutenants at Verdun, and as skilful in fence as in thrust, who had been retired with General Nivelle in 1917. With General Mangin, whose return to army command, first in the neighbourhood of Montdidier and then at Villers-Cotterets, was very significant, were other commanders of proved ability in General Berthelot, General Degoutte, General Mestre and General Fayolle. On the Champagne line was General Gouraud, distinguished by his defence of the Argonne forest and his actions in the ravines of the Gallipoli peninsula. He was aware of the storm that would break upon his front, and had a method of defence in readiness. General Humbert, on the Noyon sector, was also prepared to receive Ludendorff's shock divisions, and upon him the first of the final strokes of the enemy fell.

At midnight on June 8 General von Hutier bombarded all the French line from Montdidier to the Thiescourt hills, and with a host of 250,000 men endeavoured to remove both the Amiens and Marne salients by connecting them in a rapid advance on a front of 22 miles to Compiègne forest and the Méry plateau. From the Méry position he could complete his work of the March offensive and cut the Calais-Paris railway. From Compiègne forest he could turn the Villers-Cotterets line, and with General von Böhn's armies move in a vast crescent towards Paris. The plan of brother-in-law Ludendorff was very ambitious, but the strength to execute it was lacking. The drain on the Germans' main reserve was at last beginning to tell. Many of their best troops were killed or maimed, and their general numbers, though still exceeding those of the Allied forces, were insufficient for their way of fighting.

This was very clearly seen in the conduct of the new battle by General von Hutier. He began superbly by getting his men to creep down the valley of the Matz stream, below Lassigny, and make a surprising swoop on Gury hill, on June 8, before the pitched battle opened. Then, with tremendous gusts of poison gas fire and high explosive, his gunners ploughed and drenched the river valley to a great depth. The French troops gave ground to a depth of four miles. In the circumstances this

was the only answer to the enemy's overwhelming attack. Hutier then had a central corridor of advance, from which he had only to expand on both sides in order to turn the Méry plateau westward and the Thiescourt hills eastward. But all the French commanders concerned had been expecting the grand struggle.

The defending forces were therefore arrayed in great depth, with a wide covering zone, held only by battalions on divisional fronts, but supported with quick-firers as well as infantry guns and machine guns. There was no sentiment about losing guns or ground so long as the light cannon did their work. The French generals cared for nothing except the lives of their men. French munition factories, supplying the United States army in addition to the French with artillery, could quickly replace lost guns. Only men were irreplaceable. So France deliberately gave guns to the enemy as well as land. Hutier used his forces in massive thrusts, with the usual infiltrating detachments searching and testing the ground between them. Smoke screens divided the troops of the defence, while barrages of special shell rolled over them and their telephone lines. But Foch's lieutenants did not require to be set the same problems in tactics twice in a fortnight. They had the solutions. All along the line, from the valley below the Méry upland to the low ground by Renaud hill, their gunners caught the German waves of assault in the rolling fire of "75's" and heavy guns. They counter-batteried the hostile parks of artillery with long-range pieces, made a general curtain of shell along the front with medium ordnance, and used the light quick-firers by hundreds in the covering zone.

There were about 140,000 German troops of the shock-division class exposed to terrific gun fire at short range, with machine guns playing through the shell tempest. They faltered on the wings of the battle front below Noyon and below Montdidier, where even the French advanced posts held. By the edge of Méry plateau the post on the slope at Courcelles remained unconquered, although the swarming forces of attack worked at last around it. On Plémont hill a dismounted cavalry battalion was overrun yet unshaken, and behind them the main wooded clumps of the Thiescourt hills formed a battle rampart both against flanking forces and against the frontal divisions of attack.

By nightfall General von Hutier had done little more than exploit his preliminary success on the Matz river by widening the corridor to the extent of four miles. This merely brought

him to the opposing battle positions of a single divisional sector, at a price of his strength in men that left him weak when the crisis came. Using up more men, he increased his pressure throughout the night, and by extreme violence tried to achieve a decision the following day. Crowding his men along the Matz valley and the Gury road, he broke through the centre battle zone at Marquéglise and drove the French to the Aronde river. It was a spectacular advance to a depth of 10 miles, enabling him to plan a rapid turning movement past Laigue forest into Compiègne forest. General Foch prepared for such a movement by ordering the army on the eastern side of the Oise river to withdraw from Choisy hill and Carlepont forest down to the outskirts of Laigue forest. On the western side of the river the Thiescourt hills and Dreslincourt heights were abandoned, and the line drawn down to the level of Laigue woodland. This was done to avoid close fighting at Hutier's strongest point. But the German commander's new plan was completely spoilt. For in the meantime, by the Aronde stream, the French rallied magnificently, broke his men, and pursued them for three miles.

This glorious recoil marked the turn of the tide in the affairs of the Grand Alliance. In numbers the French force was much inferior to the German masses it broke, and, moreover, instead of being part of the general army of reserve, as Ludendorff stated in his daily report, it was formed of rallied troops and their last local supports. Foch and Fayolle were waiting until their men in action had worn 250,000 Germans down as low as possible before launching a force from the general reserve. This force was ready and close, but kept concealed. It would have been wasted by the Aronde on June 10. For some of the detachments in the covering zone were still distracting and enfeebling the Germans. On Plémont hill the cavalry was fighting greatly, and after breaking 14 assaults a remnant cut its way back. At Courcelles the advanced guard did not attempt to escape. It fought when it lost its position, counter-charging and recovering the ruins, instead of hacking its way back to its withdrawn battle line.

The men of Courcelles had their reward on June 11. The sudden French retirement on Hutier's left prevented him from striking in force there immediately, as it was designed to do. It further induced him, also according to General Foch's plan, to devote his attention to the Méry upland, on which he had won a footing and incurred a smarting check. The German

commander organized a terrific drive over the plateau. He deployed his divisions each on a front of some 750 yards, which was about three times as close as the common German practice, and four times as dense as the French formation for shock effect. Upon his forces moving into action thus packed there fell the first great stroke of surprise that Ludendorff and his captains had reeled under since the tanks were used at Cambrai.

The tank was again the instrument of victory, but it was the new light, mobile car of assault. On a front of seven and a half miles, from Rubescourt, south of Montdidier, to St. Maur, south-west of Lassigny, Foch's mass of manœuvre opened a counter-offensive instead of the routine counter-attack. Overlapping the oncoming German mass, and hiding itself in undulating ground until it topped the rise which the German advance parties were approaching, the first veritable army of the Allied reserve paralysed and smashed the reinforced army of General von Eben, who was one of Hutier's best men. General Mangin rode the enemy down with the new storming cars. The French tanks had a speed of seven and a half miles an hour, and were in large numbers, like mechanical cavalry, between the waves of infantry. The depth of ground won covered only the lost strip of the Méry upland to the outskirts of St. Maur, Courcelles, and Le Frétoy, reaching a mile and a quarter in the centre, but the slaughter that took place was terrible. Many of the Germans resisted bravely ; many fled ; but the number of prisoners taken—1,000, with 10 guns—gave, like the extent of the ground covered, no indication of the importance of the victory.

Hutier was put completely out of action. He made one demonstration against the Méry upland, which was checked by gun fire. Then he stood still until August, 1918. The general action around the delicate Marne salient was resumed, by means of a new thrust by General von Böhn, directed between the Aisne west of Soissons and the northern side of Villers-Cotterets forest. It could be accepted as an attempt to turn the forest from the north, but it was rather a defence of the communications from Soissons to the Marne line. The French commander replied by a counter-thrust, and for more than a month little besides skirmishes and demonstrations occurred.

CHAPTER 8

America's First Efforts

In a previous chapter the efforts made by Americans in America to meet the demands of an offensive war, in men and money, were recounted in some detail. But before an army of the size contemplated by Americans could be landed in France, the most careful measures had to be taken for its reception. Even before General Pershing arrived in France a number of staff experts had reached Europe for consultation with the staffs of the Allies. In particular, many prominent American business organizers, engineers, and the heads of great concerns who had been called up for the United States Reserve of Officers, had been dispatched to Europe to make arrangements for the reception of an American army of 2,000,000 men.

The American experts found themselves confronted by a very serious problem. The Americans' aim at first was not to send small sections of men to work under, or be dependent on, other armies, but to have a complete army of their own, with its bases in France, and completely equipped and self-contained. To reach France these troops had to undertake an average journey of 3,000 miles. Arrived in France, their landing place was naturally on the Atlantic coast, some 400 miles distant from the seat of war. There was no machinery in France capable of handling their men. They found that they would have to build fresh ports or extensions of old ports to receive their ships when they arrived. They would have to build warehouses. All the food of the army, or practically the whole of it, would have to be brought over from America, and it was realized that unless food sufficient to last the army for some weeks was held in store, an unfavourable turn of the war might produce a very serious condition of affairs.

The burden of supplying this army would fall upon the already overworked French railways. South and west of Paris they were already working to full capacity to supply the French and British armies. It was imperative to avoid congestion, and new lines were inevitable, for an examination of those running from the

Atlantic coast to the front showed that they would be incapable, without vast additions, of dealing with the American traffic. New cities must be built, arsenals and foundries for the artillery, air cities for the thousands of airmen, towns for salvage work to deal with the necessary repairs and with the utilization of the waste of war. The most that could be expected from America was that it should send the material and foodstuffs over. Repairs, renewals, reconstruction, and storage had to be done in France.

The first question to be decided was in what section of the front the American army was to operate. Partly because of the railway difficulty, partly because of its obvious potentialities, it was agreed, at a conference held between General Pershing and the Allied commanders, that the first American objective should be the reduction of the St. Mihiel salient, which for over three years had been a thorn in the side of the Allies. Lines of supply connecting this area in eastern Lorraine with the Atlantic ports would run conveniently south and east of Paris.

With the least possible delay Americans set to work. They started at the ports, extending them in such a way as to create what were virtually new dockyard cities. St. Nazaire was selected by a Franco-American commission as the principal port for the debarkation of American troops when they began to reach Europe towards the end of 1917. Formerly a port of call for tramp steamers and coastwise shipping, it was enlarged to accommodate a continuous stream of troops and supplies. The harbour was dredged, new piers were built, and to supplement the port accommodation the construction of a wharf was begun at Montoir, a little higher up the river Loire. At this spot was erected a depot covering 2,000 acres, with over 4,000,000 square feet of storehouses and 10,000,000 square feet of open storage space, and requiring for transport purposes over 200 miles of railway track.

The labour problem was a serious one. A camp had to be built for the thousands of workmen. Of these men, some were negroes from America, who adapted themselves readily to the conditions of life in the new land. The American negroes especially liked France, because there was no colour question there, and the black man was treated the same as the white. Labour was secured from as far afield as Morocco and Greece, and workers from both East and West could be seen working side by side in the old French town.

Next came the problem of the railways. French railway methods and American railway methods were different. The French primary idea was safety, the American idea was speed. The Americans—by sidings, ample terminal facilities, and the quick dispatch of trains—carried at least 50 per cent more goods over a single line than the French could. Then the French railway tunnels were not large enough to pass the great freight cars brought over the Atlantic. A number of these freight cars had to be discarded. The Americans, with the permission of the French, did away with many of the turntables, and set about extending the terminal facilities and constructing branch lines and double tracks for certain sections. In all, the Americans constructed within a year about 1,000 miles of fresh track in France, and imported large numbers of 150-ton locomotives and 20-ton freight cars for use.

The salvage service of the American Expeditionary Force established its first depot at Saint Pierre-des-Corps, and by February, 1919, the depots, shops and laundries of this service occupied a floor space of 989,860 square feet. Each depot had seven departments: laundry, clothing, shoes, rubber goods, leather and harness, canvas and webbing, and metal; and in the shops many articles were made from scrap materials. After an action the discarded clothing and equipment were collected by the salvage corps and stored in dumps to await treatment.

The Americans were resolved to use automobiles to the utmost extent in their legitimate sphere. They did not propose to employ the automobile for heavy freight work, which could be more economically done by railways, but for every possible service motor-cars were to be provided. The first provision was made for 60,000 motor-vehicles, and a staff of 3,000 men was centred in one town to keep these in repair and supply necessary parts. A great mechanical bakery was erected, with two buildings, containing 100,000 square feet floor space each, to bake 500,000 rations of bread per day. One section of engineers planned and built a large artillery repairing shop, where field guns and guns of all sizes up to the largest used by the army in France could be relined and renewed.

The Americans had to bring over all their own oil, and immense tanks had to be built for its storage. Oil by the 100,000 barrels could be sucked direct from the oil steamers to the tanks and then run off at once into barrels or into tank-cars, of which

there were 600, for transfer to other storage centres in other parts of France. Refrigerating experts were employed to build vast meat storage rooms with 500,000 cubic feet capacity. Some of these refrigerating plants were capable of holding thousands of tons of meat, and could produce hundreds of tons of ice daily. The largest building was about 1,000 feet long. Three railway lines ran on one side of it, and one on the other. There were only two larger plants in the United States—one at New York and one at St. Louis. In all, the American government undertook works of preparation in France during the first year of the war involving an expenditure of no less than $400,000,000, or just about £80,000,000.

The first troops to land in France were drawn from the Regular Army, the National Guard, and the Marines. The Regular Army, a small, highly trained body, had been greatly strengthened immediately after the outbreak of the war by large numbers of young volunteers who rushed to join it. The physical bearing of the men, their discipline and organization, greatly appealed to all skilled military critics; the only adverse comment passed was that some of the senior officers were rather older than was good for active war, and might not be able to stand the strain of a campaign. General Pershing recognized the justice of this criticism. Every officer, old and young, had to undergo at intervals a physical examination. Those who could not show fitness were transferred behind the lines or to home duty.

The National Guard differed from the Regular Army in being a volunteer militia, organized by states for interior state protection in times of peace, but subject to calls for special service. Immediately on the outbreak of war the government had called up the National Guard and raised it to war strength.

The Marines, who formed the third section of the first arrivals, need to be specially mentioned because they rank among the foremost fighting corps of the United States. "Wherever America is in a scrap in any part of the world the Marines are there," was a saying in the days before the Great War. This reputation secured for them, when war broke out, the pick of the very highest type of recruits, many of them drawn from the universities of the Middle West, who eagerly competed to be allowed to join as private soldiers. The National Army, the new force of 1,000,000 young men raised under the draft law, did not begin to arrive in Europe until the summer of 1918.

General Pershing and his staff settled down in Paris. They found almost immediately that it would be necessary for them to have their own telegraph and telephone systems if they were to conduct operations without delay. This involved the construction of a complete set of lines from various points on the Atlantic coast right through the heart of France to Paris, and then on to the Lorraine border. Another direct wire connexion was made with London, where staff work rapidly grew. These lines were put up with great rapidity, and it was interesting to note the fresh wooden posts with their taut wires and the marks U.S.A. on them, running parallel with the older and slacker French wires. In October, 1917, the American troops, who had been steadily increasing in numbers, began to move to the front, and towards the latter part of that month they took their places in the line, acting with French troops.

The Americans planned to place five divisions as soon as possible in the fighting line, and to have for the start 500,000 men in France. The first troops to arrive in France reached St. Nazaire on June 26, 1917. They were four regiments of the Regular Army, being the 16th, 18th, 26th and 28th regiments of U.S. infantry, and the 5th regiment of the U.S. Marine corps. Some of the divisions which came over brought a reputation of their own with them. Each of the divisions of the Regular Army had its special traditions going back to the Civil War; the National Guard went back still farther. The New England division, for example, had in its ranks the direct descendants of the minute men and of Ethan Allen's mountaineers who figured prominently in the revolution of 1776-83. Their officers, when reminded of the Boston "tea-party," declared that they had come to Europe for a very friendly tea drinking. The Rainbow division was so called because it was drawn from 18 different states of the Union.

Apart from the many problems of supply and communication confronting the American headquarters, the task of training the troops for the part they were to play presented to them no little difficulty. Convinced that open warfare tactics were to prove the keynote of success, General Pershing insisted upon adequate training for all his troops in those matters. The initial period was stipulated to be three months, but after the great German push in early 1918 that period was drastically shortened. In the end, the period of training varied from six days to five weeks.

Another great difficulty was the shortage of officers who could carry out the necessary duties, and in order to overcome this the French suggested that American divisions should train side by side with new French divisions. This was tried for a time, but the desire of the Americans to preserve their own methods and their independence led eventually to the discontinuance of this training, and energetic steps were taken to provide American instructors. Inevitable delays occurred, and the policy of the American command is questionable; especially as the troops were brigaded with French and British units in the line in order to give them the necessary experience.

On October 20, 1917, the advance troops of the 1st division relieved some French regiments holding the trenches near Sommerville, some seven miles south-east of Nancy. The battalions were alternated along the front with French battalions and remained in this quiet sector for 10 days. This was the first occasion on which American troops came under fire in France, and under French command they began to learn the nature of trench warfare. They were then relieved in turn by other units, and the process went on. But it was not until 1918 that American troops held a sector on their own.

The last months of 1917 and the early months of 1918 were devoted to the great tasks of raising an army in America and preparing for its reception and maintenance in France. In this the Americans showed remarkable ability, the wealth of detail and accuracy in their organization being a model of efficiency.

As the stream of transports continued to arrive in ever-growing numbers at the French Atlantic ports, so the troops were disembarked and marched away into the interior to their various training camps. After going through manœuvres and learning all that could be taught them there, the men were taken up in small units to the front where they were brigaded with French and British regiments and experienced first hand the conditions under which they would soon be fighting seriously.

In equipment the troops were magnificently provided for, and their supply system was admirable. The first troops, however, were unprovided with gas-masks, and this serious deficiency was made good by French and, later, British authorities. The British model of helmet and respirator was issued in enormous numbers to the American troops. In a second particular, also, the French and British completed the equipment of the army.

Partly because American preparations were far behind, while French and British production was magnificently organized, and partly to economize transport, it was decided that American artillery, light, medium and heavy, should be provided entirely by the Allies. The guns used by the American army were accordingly supplied from French and British sources.

During the early months the American air service was in its infancy. Responsible leaders of American flying were sent to France, and a big flying and training ground was built in the heart of France. So many young men volunteered for the flying corps that it was possible to pick out the recruits with the utmost rigidity. The Americans adopted the plan of the British army of having all pilots officers, and not the French plan of using N.C.O.'s and men as pilots.

The authorities responsible for the production of aircraft stated that they would have an engine surpassing any in the world—the Liberty engine. All the noted aeroplane and automobile engineers were brought together into conference, when it was agreed that each should reveal his own special secrets of efficiency, that the best points of all might be combined in the national engine. Theoretically excellent, the idea worked out far from well. Individual points of excellence need to be synchronized and harmonized when they are brought together in one machine. The conferences of the committees led to long delays. When plans of the different types of engines were decided upon, it was found that further delays occurred in production. Certain people in America promised that 20,000 American aeroplanes would be in flight in Europe in the spring of 1918. One or two put the figure at 50,000. They did not realize the vast equipment for each squadron of a score of aeroplanes—the staff, the repairing plant, and the like. A squadron of 20 aeroplanes employs 150 men, and has a fleet of cars, repairing cars, and the like for its requirements.

Instead of there being 20,000 aeroplanes in flight in the spring of 1918, the first batch of engines had only arrived in France for testing. The Americans, in order to help the Allies, sent large numbers of men—trained aeroplane mechanics—to the workshops of the United Kingdom. They had also sent a number of their own men, qualified pilots, to the air forces of England and France, where they were doing admirable work. But the American army and the American flyers were still depending on

European-made machines, and it was impossible to obtain an adequate supply of these owing to the demands of the air services of the European countries themselves. Both France and England, however, endeavoured to supply the Americans as far as they could, and several thousands of engines were dispatched to the American flying grounds for assembly.

French and British tanks were used very largely by the American army during the first months of their fighting. But gradually, as the enormous production plants of America began to speed up, the deficiencies in all these things were made good, until by the end of the war the American army was practically self-sufficient. It must not be forgotten that America's Regular Army was exceedingly small in 1917, and that its equipment had not extended beyond the 1914 level. Three years of modern warfare in Europe had produced a revolution in the auxiliary arms that had made those of 1914 almost medieval.

By the end of 1917 the number of American troops in France was reaching large proportions. The stream of convoy transport steadily increased, and the American navy had to shoulder a heavier and heavier duty. That it performed its work well, the following figures show. From June, 1917, until the end of the war, over 2,000,000 troops were carried 3,000 miles by sea, and not one ship was lost. The German submarine campaign was at its height during most of that time; but in spite of this fact only three ships were torpedoed, and all three were on their return journey. In addition to this huge number of men, some 7,500,000 tons of supplies were carried over. American shipping alone was inadequate, and it is not surprising to learn that over 50 per cent of American troops were carried in British vessels.

By January, 1918, the first arrivals among the American troops were considered fit to take their place in the line. Accordingly, the 1st division, under the command of Major General Bullard, moved up from Gondrecourt, where were American headquarters, into that sector of the line north-west of Toul. The Toul sector, as it became known, was held by Americans until the end of the war, and in it many of the American troops received their baptism of fire. At first the sector remained under French control, but when the American staff organization was complete, it was handed over to the Americans exclusively.

The country in which the Americans now found themselves included some of the most historic fighting ground in France.

They were opposite the lost province of Lorraine, and from some of their positions they could see the smoke coming from the factories of Metz itself. South of Verdun was the St. Mihiel salient, held by the Germans, projecting, like two sides of a triangle, into the French front. Immediately around it was a country of woods, hills and valleys. Important military cities like Toul, Nancy and Epinal lay behind, cities that were the constant objective of German aeroplanes.

The great Saffais plateau formed a natural barrier which had saved the French line in August, 1914. There were towns like Lunéville which had been overrun by the Germans in their first advance at the opening of the war, and which still showed, in their blown-up bridges and their burned-out houses, what German occupation meant. Two fast-flowing rivers—the Meurthe and the Moselle—ran through the country behind. There were great iron mines here, but the dominating note of the country was rural and agricultural rather than industrial. The forests to the north, in particular—forests which had not suffered so much destruction as those in some other parts—gave a pleasant note to the land. This was in times of peace one of the most prosperous, fertile parts of France, and in one section of it was to be found one of the most famous health resorts of Europe.

This section of the line, although it had witnessed much of the bloodiest fighting of the late summer of 1914, had become comparatively quiet. The Germans were concentrating their attack elsewhere. They had Landwehr battalions to hold the front, and the most exciting experience some time before the Americans arrived was when a flock of wild geese flew over part of the line, and French and Germans jumped on their parapets to fire at them. But the Americans decided to alter all that. The Germans, finding themselves affected by numerous raids and by increasing artillery fire, began to reply in kind.

The American army's first offensive action was in the middle of February, 1918, when, on a Wednesday afternoon, the American batteries took part in the artillery preparation for an attack by the French at the Butte du Mesnil. The French attack was completely successful, capturing a position which had held up the French advance in September, 1915. The work of the American batteries was a considerable factor in it.

In the meantime, further American divisions had taken over sectors. Thus the 26th division moved up to the Chemin des

Dames on February 5, the 42nd to the "Baccarat sector," near Lunéville, on the 16th, and finally the 2nd moved into a sector to the west of the St. Mihiel salient before the end of the month.

The object of these moves was to acclimatize the American troops to trench warfare conditions, and the divisions were generally under the command of the French for a period. The Americans had to be taught self reliance in the trenches before they could be used for the offensive which General Pershing was preparing against the St. Mihiel salient.

The work of the American troops at this stage was a severe test of soldierly qualities. This holding the line meant living under almost continuous artillery fire, often in cellars of ruined villages, being shelled and gassed and raided at every opportunity. The German gas-shells, the fumes of which settled low down, clung about uniforms and made cellars and places of ordinary shelter uninhabitable for long spells at a time, were a great strain upon fresh troops. The troops could, at least, console themselves with the knowledge that they were sending more shells and worse gas than the Germans were firing on them, for careful precautions were always taken to ensure that the new troops were abundantly supported by artillery.

One fine regiment, occupying one of the first sections of the line taken over by the Americans, came in for a very trying time. It was shelled by the Germans day and night, gas-shells being largely used. Some of the troops, new at the work, found it difficult to remember to keep their gas-masks always by them. This increased the casualties. Yet when, after a few days, the authorities resolved to have a raid, every man, down to the cooks and the orderlies, volunteered for the undertaking.

It was hoped that this process of hardening the troops in quiet or comparatively quiet sectors could continue until a sufficient force had collected to make it possible to deliver a large-scale offensive. But the collapse of Russia and the liberation of German troops from that front gave Germany a superiority in man-power which she was able to exploit in her great offensive of 1918. At once it became urgent that American troops should arrive before Germany had broken the Allied front. American divisions already in France were flung piecemeal into the bending line in an effort to stay the tremendous pressure of the German push, and the dispatch of new divisions was speeded up as the time of training for the new arrivals was shortened. In the result

it was not until September that an American army as such was organized. Up to that time, American troops formed part of French and British corps in the fighting line.

The decision to take this step, which was in direct contradiction to American intentions, was compelled by the gravity of the situation at the end of March, 1918. On the 28th of that month, Marshal Foch was made commander-in-chief of the Allied armies in France, and the same day General Pershing gave up the tactical command of the American troops and placed them unreservedly in the hands of Foch. This wise and generous decision not only strengthened the Allied forces at the most critical period of the war but did much to smooth the friction and improve the harmony between the British and the French on the one side and the Americans on the other. But even more than this was done. On April 1 it was officially announced that, as a result of communications and deliberations between the different parties, the American government had agreed that such of its regiments as could not be used in divisions of their own might be brigaded with French and British units so long as the necessity lasted. A great improvement in the solidarity of the Allied front was at once ensured.

The placing of the Americans under the supreme command of General Foch caused immediate developments. One division of American Regulars at once moved up from the Lorraine front to help the Allies farther north. Other divisions that had just come out of the lines for a rest were hurried back there. French troops were relieved in the Lorraine sector, and Americans were given entire charge of a considerable part of the line here. This decision meant that the large number of Americans pouring into Europe could go at once to sections of the fighting line without waiting for their own secondary services. They could thus immediately reinforce the British armies, which had suffered so heavily, and the French on the eve of their great conflict.

The first test of the Americans under heavy and serious fighting conditions took place on April 20, and the result caused some disappointment. The 26th division was holding the line west of Remières Wood, having just taken over from the 1st division. In order to test the quality of the American troops, and, if possible, to demoralize both them and the Allies, the Germans executed a raid on the west of the line at Seicheprey. The raid was carried out across well-mapped ground, and it found the

Americans quite unprepared. Just over 1,000 veteran German troops, attacking suddenly, drove in the American outposts, captured the entire garrison of the forward posts, 180 men with 24 machine guns, and occupied the town. For 12 hours the Germans maintained their position, and it was not until French troops from the right reinforced the counter-attacks that the Americans were able to dislodge the enemy.

The effect of this successful German raid was particularly unfortunate, coming at a moment when the Allies were beginning to count upon American troops, and, although there was much to be said in defence of the Americans, who were troops and officers of a few weeks' experience only, fighting against veterans on ground that was almost unknown to them, the impression created was distinctly unfavourable.

It was partly out of a desire to vindicate American reputation that the 1st division launched its successful attack on Cantigny. About three miles west of Montdidier, Cantigny formed the point of a small salient projecting into the Allied line. The American intention was to capture the town and hold it against the counter-attacks. Strategically of little value, except in so far as it flattened the line, the attack, if successful, would do much to heighten the confidence of American troops generally.

The place, though weakly held, was a strong one, and being on a salient was a convenient concentration point for the German artillery, both line and reserve. Great care was, therefore, taken to ensure that the preparations should not attract too much attention. Minutely detailed plans of communication were worked out, and in addition to a tremendous park of artillery, 10 French tanks and a platoon of flame throwers were collected to assist in the attack.

But the bustle of preparation had roused German suspicion, and, 24 hours before the attack was scheduled to begin, a series of raids, accompanied by an intense gas bombardment, was launched on the American lines. A dense fog obscured the position still further, and the American artillery failed to put down a barrage. The infantry were left to repel the German attack almost unaided; but they performed their task well, meeting the waves of enemy with volley fire. Only in two places did the Germans reach the line, and by the time the artillery had begun their barrage the attacks had been beaten off. This success encouraged the infantry, though some doubts were felt

about the co-ordination of the artillery. Fortunately the attack on Cantigny was a complete success. A terrific artillery fire from the American batteries bore down the guns of the opposing forces and tore the German defences to shreds.

After a final, crushing concentration, the 28th infantry regiment, with the 26th in support, scrambled from their trenches and, led by tanks, followed closely after a rolling barrage. Within 40 minutes they had reached their objective, captured several hundred prisoners and were digging themselves in, in Cantigny. The attack had demonstrated a perfect co-ordination between all arms. This attack was, of course, a very small affair compared with other happenings in the battle, but it gave good proof of the American qualities. In beating off the immediate counter-attacks the Americans remained steady, and the Germans were forced to fall back. The main attack was launched on the morning following the American capture, and was preceded by a very heavy bombardment. Large bodies of German troops then advanced, but the American artillery was by this time prepared, and, by concentrating upon them, held them up before they reached the American position.

German efforts to dislodge Americans from the first ground they had won ceased. The whole move had been carried out with the greatest precision, and the American soldier had shown qualities which were distinctly encouraging. The capture of Cantigny created a good impression throughout the French and British armies, which was all the warmer in that the success came at a time when it was most needed.

By this date, the success of the German offensive was becoming alarming, not only in the gains of ground it was recording, but in the fearful loss it was inflicting upon the French, and particularly the British, armies. The need for men had become desperate. German advances were still continuing, and the Allied reserves were rapidly being used up, whereas the German reserves from the Russian battlefields were still far from exhausted. A conference was hurriedly called, and General Pershing in his report said:

> As German superiority in numbers required prompt action, an agreement was reached at the Abbeville conference . . . by which British shipping was to transport 10 American divisions to the British army area, where they were to be trained and equipped, and additional British shipping was to be provided for as many divisions as possible elsewhere.

America herself was ready to support the general. Now was shown the wisdom of the intensive year of preparation which had passed. The troops had already been raised, equipped and drilled in America. They were waiting—1,000,000 of them—to move across the sea. The shipping policy had helped to obtain the ships ready for them; vast supplies had already landed in Europe; adequate methods of transportation had been evolved.

The war organization of America, by which the president is virtually autocrat for all war purposes, was shown in its real strength. President Wilson himself took a direct part in the shipping situation. Vast armadas, such as had never sailed the seas before, quickly assembled at various Atlantic ports. Monster German liners were transformed into American troopships. Luxurious ocean-travel ships were gutted and fitted with bunks and men packed in them by the thousand. The number of American troops coming to Europe rose within a few weeks from 100,000 a month to an average of 10,000 a day.

By the end of May, 1918, nearly 500,000 troops had been landed in France, of whom some 300,000 were contained in 11 combat divisions. Of these, four were trained or nearly trained divisions of experienced troops, but the remainder were still in their training stage. In spite of this, however, German pressure had become so acute that all the divisions had to be placed in the line or in line reserve.

As the result of General Pershing's agreement with the Allies, a great redistribution of American troops took place throughout midsummer. The 4th, 35th and 77th divisions were up in the St. Omer area behind the British line, the 1st was holding the Cantigny sector, with the 2nd division in reserve, and the 28th moving up. The 26th was in line in the Toul sector, with the 5th and the 3rd in reserve, and in the Vosges the 42nd and the 32nd held the Allied line from south-east of Nancy to Belfort.

American troops were preparing to resist the German push. In the long series of defensive battles fought from May 27-August 6, they were to acquit themselves well and get the experience of war that was to stand them in such good stead when the Allies launched their final and victorious attack.

CHAPTER 9

The Americans in Action

THE decision to employ the comparatively untrained American troops in the front line, in order to help hold up the great spring offensive of the Germans in 1918, was reached early in May, and in a previous chapter mention was made of the redistribution of the American divisions along the length of the line, and of their successful attack upon Cantigny.

Their part in the Allies' defence of Paris has also been touched on in other chapters. It must be remembered that they had never yet been engaged as a distinct army, but were included piecemeal in the various French and British corps which opposed the German thrust. But the work of the Americans in their first real experience of heavy warfare over an extended period deserves more detailed mention. The period began on May 27, when they took their places in the defensive cordon thrown across the front of the German attack, and ended on August 6, when the enemy was forced back and the initiative passed to the Allies. General Pershing has divided the fighting during that period into four parts, and for the purposes of clarity it is useful to adopt that division. The first is the Aisne defensive, the second is the Montdidier-Noyon defensive, the third is the Champagne-Marne defensive, and the last is the Aisne-Marne offensive.

By the end of May, 1918, the situation on the western front had become critical. The German offensive, begun on March 21, had achieved an alarming success. The chief thrust had been directed towards Amiens, just at the junction of the French and British armies, and the intention of the German high command was to break the connexion between these two and seize the Channel ports before America could make her real strength felt. The capture of Bapaume and Péronne on March 24, of Armentières on April 11, carried the German arms to Amiens, and only the grim and costly defence of that town by the British on April 24 brought the German armies to a halt.

But the salient that had been created in the Allied line was fraught with danger. German reserves were still overwhelmingly

strong, and Ludendorff had the further advantage of fighting on interior lines. Foch drained his trenches to the east and packed his reserves on either side of the danger point south of Amiens. But Ludendorff's Intelligence was serving him well, and on May 27 he launched his second great attack, not where expected, but eastward from Soissons along the line of the Chemin des Dames. Eight French and British war-worn divisions, recuperating after weeks of fighting to the north-west, were overwhelmed by 25 divisions of German storm troops.

For three days the German troops advanced on an average over 10 miles a day, capturing 400 guns and over 40,000 prisoners. It was the biggest and most astonishing advance of the war, and for a moment left the Allies paralysed. By May 30 the Allies found themselves on the old 1914 line of the Marne, and here the German drive was stayed. A second and equally dangerous salient had been driven into the Allied line. But Foch was determined to hold his reserve divisions untouched. He wished to keep them for the great counter-attack which he intended to launch when the German attack had reached the limit of its power. To this end, therefore, he kept his French divisions in reserve, and threw the comparatively untried American 2nd and 3rd divisions into the Marne salient to support the overwhelmed French and British troops.

The two divisions reached the new line on June 1, their advance patrols having moved into Château-Thierry and been engaged on the previous day. At first the 3rd division was split up amongst the various French forces, and the 2nd division was held in reserve, digging in on a line slightly behind the front. With the beginning of the great German offensive in March, trench warfare had almost come to an end, and troops found themselves fighting across open country instead of behind complicated systems of field fortresses. The training the Americans had received thus stood them in good stead.

The 3rd division was stationed from Château-Thierry eastward along the Marne, and although the Germans attacked resolutely time and again the fresh American troops drove them back steadily. But the danger in the position was westward of the town, where the 2nd division was entrenched behind the front line of French troops. The Germans had been stopped on the line Monneaux-Vaux, but they had obtained control of Hill 204, an eminence which so dominated the whole position as to make

the defence of the river crossings extremely difficult. Accordingly, on June 6 a combined attack was made by the 3rd division and French troops across the river, which took the hill in spite of fierce opposition, and thus secured Château-Thierry. This front being comparatively stabilized, the centre of the fighting was transferred west of the town, where the 2nd division now found itself in the front line as the weary French divisions had withdrawn behind the Americans.

The German position in front of the American line was eminently favourable to a continuance of the attack. In consequence the 2nd division prepared to counter-attack in an endeavour to improve their defensive power. As the 3rd division attacked Hill 204, the 2nd moved out against Belleau Wood, Bouresches and Vaux. Covered by a rolling barrage, the Americans seized Bouresches and penetrated into the wood, which was found to be almost impenetrable and defended by innumerable machine gun nests. Progress was slow and costly, but the Marines, who were in charge of this part of the attack, pressed forward, and by June 12 half the wood had been captured. The Marines were then relieved and replaced by French infantry, who continued the attacks, but with small success. But American pressure on the right and left of the position was growing, and when the Marines returned after their relief on June 22 better progress was recorded. By June 26 the wood had been cleared, and room was thus made for the extension of the attack.

On July 1 a spirited assault on the right of the wood resulted in the capture of Vaux and the Bois de la Roche. All the objectives of the Americans had now been attained, and the Allied line had been carried forward over a mile and a quarter along a five mile front. Nearly 2,000 prisoners had been captured with several guns and many machine guns, and the Americans had proved their quality. Attacking against veteran troops flushed with victory, they had carried one strong position after another, and their success, coming at a moment when defeat seemed imminent, produced a most favourable psychological effect upon the Allies.

The part played by Americans in the Montdidier-Noyon defensive was equally effective. After the creation of the Marne salient, Ludendorff, finding that it was becoming ever narrower, leaving no room for the employment of his superior numbers, decided that it must be widened if the German advance was

to be continued. Its base rested on a line running from the forest of Compiègne to Reims. Both the forest and the city had become immensely strong fortresses under the hands of the Allies, and attempts upon either of them would involve a cost in men and time that would be prohibitive. East of Reims the direction of advance would be valueless, but west of the forest the Allied line was already weakened by the creation of the Amiens salient, the bulge of which had disturbed the positions round Montdidier. An attempt to break through between that place and Noyon might well prove successful, and success there would give Ludendorff all that he wanted. The forest of Compiègne would become a salient in the Allied line which could be nipped off as soon as the southern re-entrant was reached.

Unfortunately for the Germans, Compiègne was one of the centres which Foch had suspected, and it was here that he had massed his reserve troops and artillery. The American 1st division was still in line after its successful attack upon Cantigny, and was thus destined to become the left flank of the forces with which the Allies opposed the German thrust. During the first week of June it became increasingly clear that the German attack was imminent, and the most energetic steps were taken to resist it, an enormous park of artillery being gradually massed behind the Allied line.

The attack was begun on the night of June 8-9, being preceded by a bombardment from German artillery that lasted from midnight until dawn. This was the first experience Americans had had of a bombardment on such a scale, and although the valley they occupied was drenched with gas, and their defences were shattered, they displayed a fortitude that was remarkable in such comparatively untried troops.

When at last the German infantry advanced the extent of the Allied precautions was disclosed. Not only were the packed masses of infantry literally swept away by the tornado of shells loosed upon them by the Allied guns, but their lines of communication were wrecked by an equally intense fire. Their supports could not move forward, and the terrible execution of the French machine guns robbed the attack of its force. The Americans had not been seriously involved, the brunt of the attack falling upon the French.

With the failure of this effort to widen the Marne salient a month of quiet ensued. But there were no delusions as to its

portent. Feverish activity prevailed behind the German lines in preparation for a new attack. At the time it was not suspected, but it is now clear that this was Ludendorff's last throw. The utter exhaustion of German resources coupled with the menace of political revolution now looming on the German horizon made it evident that unless the Allies could be broken in this final effort the end was in sight. It was a gambler's chance, and Ludendorff took it.

Despairing of widening the salient, he decided to push through it, and at the same time to strike east of Reims. The month of waiting had allowed him to bring up his artillery and stores which had been outdistanced in the rapidity of his previous advance, to prepare adequately for bridging the river and to rest his troops. His attacks in early June had come at the end of his previous drive when its power was nearly spent. His new attack would have a fresh impetus. A crucial question for both sides was whether Germany could strike a decisive blow before the troops which were pouring into France from America were ready to take the field in really large numbers. It was fairly certain that until the beginning of August, American forces would be relatively few. Ludendorff had to strike before America, who was supplying Foch with as many reserves a month as Ludendorff received from Germany in a year, could put enough troops in the field to crush him. He chose the middle of July.

The Champagne-Marne offensive was launched on July 15. Three American divisions participated in the defence, the 3rd and the 28th on the Marne, and the 42nd in Champagne. The 3rd division had been in position east of Château-Thierry for over a month and a half, but along the line of the river the ground had not become very strongly fortified. Rifle pits on the river bank were the main source of defence, for of trenches there were very few. The weight of the German effort fell on the Mézy-Surmelin sector. To occupy the plateau overlooking the Surmelin valley was the objective. Once in a position commanding the valley the Germans would have had the road to Montmirail open to them, and from Montmirail there was a high road leading through Meaux to Paris. To prevent them from reaching their objective was of the first importance, therefore, and the 3rd division was ordered to hold them off at all costs.

The beginning was common form, an artillery preparation of furious violence. Then came a smoke barrage to hide the stream,

and at the same time a carefully planned bombardment of the positions above the river, intended to keep the Americans in their rifle pits while the Germans crossed. But the precautions failed utterly to make the passage safe. The Americans got out into the open among the bursting shells, and wherever the smoke screen was a little thin they poured in a well-aimed rifle fire as the boats packed with German soldiers were hurried over. The American gunners had been extremely efficient. They had searched the ravines along which the Germans advanced towards the river. This had not been expected, and its result was therefore to disorganize the plan of attack. Then, when they got on to the boats, with no room to move, and no sort of cover, they came under the fire of the riflemen upon the heights. Dead and wounded men fell into the water; others jumped in to save themselves. Boats capsized or had holes shot in them. Where the Marne curves at the point where it receives the little Surmelin not one German could get ashore.

This was particularly useful, because here was the point of union between two German divisions, which thus had their connexion broken. Twenty boats or so floated down stream or went to the bottom, the German landing plans were disorganized, and the German troops were shaken by the confidence and ability with which the American soldiers used their rifles. They came out under the shell fire which the German commanders believed would keep them in their rifle pits, and the accuracy of their aim fully justified their confidence.

But although the landing-party here was thus wiped out, and although at the outflow of the Surmelin no landing had been possible, yet at other points the enemy had got his troops across, and now the Americans holding the entrance to the Surmelin valley were attacked on both flanks. The orders they had were to hold their positions, and they had prepared for flank attack by making trenches. When the Germans came on, the fire from these trenches broke their onslaught and, as they faltered, the Americans saw their opportunity and took it. They counter-attacked and drove them back. The attacks were continued throughout the day, but in spite of their exposed position the Americans held their ground.

The 28th division, which had had no previous experience of the front line, had been brigaded with French troops on the west of the line held by the 3rd division. Early in the morning under

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THREE MILITARY LEADERS IN 1918. Left, General Sir Arthur William Currie led a Canadian brigade at Ypres in 1915. He was given command of the Canadian corps in 1917 and was the first Canadian to win the rank of general. He distinguished himself throughout the arduous fighting of 1918. Centre, General Sir George Milne (later Lord Milne) commanded in Salonica from 1916 to 1918, being one of the organizers of victory there. Right, Field Marshal Sir Henry Wilson succeeded Sir William Robertson as chief of the Imperial general staff, February, 1918. He retired in 1920 and was assassinated June 22, 1922

Imperial War Museum

HIGHLANDERS IN THE ADVANCE OF AUGUST, 1918. The British under Sir Douglas Haig attacked on August 8, 1918, destroying six German divisions. This photograph shows Seaforth Highlanders clearing captured trenches north-east of Roeux, where they had made a great stand in the German offensive in the spring of 1918.

cover of a barrage the Germans threw pontoons across the river and advanced with great courage under the galling fire which met them. True to their policy of yielding defence, the French troops began to retire. Four American companies, ignorant of the order for retirement, suddenly found themselves isolated in the front line. They were quickly surrounded by overwhelming forces, and a large number of them perished or were captured. But in spite of their rawness they displayed great fighting qualities, and several groups fought their way out of the mêlée and rejoined the French.

The remainder of the division was more fortunate. A German Grenadier regiment (the 6th) got ashore and made for the railway line which runs parallel with the Marne. This the Americans defended, firing into the Germans as they came on, and then meeting them with bayonets and grenades at close quarters. The Germans had the advantage in numbers, but as quickly as one lot of Americans was put out of action another took its place. Step by step the Germans were driven off the embankment, and then a fresh body of Americans drove at them in a counter-attack. The enemy was trapped. There was the river behind him, and in front there seemed to be endless reinforcements of Americans, so he began to surrender. Between that railway embankment and the river 400 prisoners were rounded up. They were all that remained of the 6th German Grenadiers.

In Champagne, the 42nd American division was on the right flank of the Allied positions attacked, near Perthes-les-Hurlus. The artillery preparation for the attempted break-through was methodical and searching. Roads were shelled steadily. The heavy guns got to work on villages behind the line. Woods were filled with gas fumes. But the Americans held their ground.

They had the consolation, such as it was—and every soldier knows what a consolation it can be in such an hour—of knowing that their guns were giving the enemy rather worse than he gave. His villages were being pounded, his roads of advance were under fierce fire. As his infantry pushed forward they met intensive barrages which tore holes in their ranks. So when the attack started the American troops were in good fighting spirit. They met the Germans with a deadly rifle and machine gun fire. They left their trenches to drive them back upon their reserves. Only in a heavily-wooded part of their line did the enemy get a short-lived footing. Here he dribbled in machine gunners and

got through the first line of the American defences. But he was held at the second line, and when the guns concentrated on the small area he had captured he was soon driven out.

Here again, General Gouraud, in command of the French 4th army, had pursued with great success the policy of a yielding defence. At terrible cost the Germans had won just the ground which the French were willing to surrender, but they could take no more. By the evening of July 15 it was evident all along the line from Château-Thierry to the Argonne that the German offensive had failed, and although the attacks were renewed throughout the next two days they were delivered with ever declining power, and were repulsed with more and more ease. By July 18 German efforts were over, and Ludendorff's last gamble had failed. The significance of these three days of combat was most vividly expressed by Hertling, the German chancellor, who, a few days before his death, said he was convinced on July 1, 1918, that the Allies would propose peace before September. He added: "We expected grave events in Paris before the 15th of July. But on the 18th even the most optimistic among us knew that all was lost. The history of the world was played out in those three days."

The Aisne-Marne offensive was the last occasion on which American troops were engaged as units under French command. After the successful termination of this offensive on August 6, the American divisions were withdrawn from the various French armies, and together with new divisions formed into the American 1st army. But the part Americans played in the offensive counter-stroke which Foch launched following the collapse of Germany's effort on July 18 was considerable.

Germany's gains in the spring and summer had created two huge dents in the Allied line. The first at Amiens was the larger and the more dangerous if properly exploited, but the second at Château-Thierry represented a definite threat to Paris. But the Marne salient was extremely weak on account of its narrowness, and it offered great possibilities to energetic attack. Nearly a month earlier, General Pershing had argued with Marshal Foch and M. Clemenceau in favour of a swift effort to pinch out the German salient in the country of the Marne and Vesle. The Germans had pushed the point of it a little farther since then, but they were now suffering from the depression caused by their failure to push it farther still. Marshal Foch

decided, therefore, to counter-attack. Whether he calculated that this was to be the first of a series of blows which would not end until Germany was obliged to ask for an armistice, it is impossible to tell; but so it turned out. From July 18 the Allied armies swept on from one success to another. But at that moment any such prophecy was beyond human foresight.

The point chosen by Foch for the attack was the angle of the Marne salient west of Soissons. By striking east from that point he hoped to drive in the German line and cut the Soissons-Château-Thierry road. The apex of the salient would at once become untenable, and could be rolled up at will. With luck the salient itself might even be nipped off, and the vast numbers of men and guns within its confines would be captured.

The Germans were known to be holding the position weakly, for no attack was expected. It had, in fact, become the quiet sector of the Marne salient where were sent exhausted battalions. The country across which attacking troops would have to advance was rolling plateau in the main, and very exposed. Indefensible against a carefully prepared offensive it was particularly suited to resist the advance of infantry which had not been aided by artillery preparation. And of artillery preparation there could be none, for surprise was the keynote of the plan.

The spear-head of the attack was formed by the French Moroccan division, in which was included the famous Foreign Legion, and the American 1st and 2nd divisions. The Moroccan division was placed in the centre, and the 1st and 2nd divisions were given positions to the north and south of it respectively. They had to get into their places quickly. The operation was planned in a hurry, and must be carried out in a hurry if the enemy were to be surprised. At times it seemed as if there would be a fresh illustration of the adage "More haste, less speed." The two divisions had to make their way through a forest, the Bois de Retz, where there are few roads, and these for the most part narrow and none too good. In the black night, with a light rain falling, it was the easiest thing possible for units to be broken in pieces, for wrong turnings to be taken, for transport to become an inextricable tangle.

There were guides posted all through the forest to pass the traffic on. The 1st division had arrived with less than half an hour to spare, but some units of the 2nd only arrived as the troops moved off to the attack. As each battalion, each ammunition column,

each battery of guns plunged into the dark forest, they were entirely dependent upon the guides for instructions. Some of these were French, and there were hitches now and then because they could not make themselves understood. Commanding officers who had gone ahead returned to bustle their men on. How all the commands got into the line on time no one who was in the dark forest will ever quite understand. But they did it, and the fear that had weighed upon the French officers that there would be a break in the line when the advance began (for it could not be countermanded at that eleventh hour) was lifted. At 4.35 the gunners put down a rolling barrage, and behind it the infantry went forward, some of the 2nd division still panting from their exertions to get there at the appointed hour.

The Germans were taken utterly by surprise. The absence of any preparatory bombardment misled them. Before they realized that they were being attacked in force they had the French and Americans upon them. They fought stubbornly, but were overwhelmed, and long before their first line could be organized for defence the attackers had pushed through and taken hundreds of prisoners. Lieutenant Colonel Frederick Palmer told of a German officer prisoner who looked at the Americans swinging past him, and then looked at some of the men who had been captured with him, one a narrow-chested, studious-looking youth in spectacles, another a short, bow-legged man of 45. Then he said sadly: "I'd like to have had to-day the men who marched with me through Belgium four years ago."

As a commentary upon that opinion, there was marched in that day a whole battalion of Germans who had been found in a quarry. There had been some firing from this quarry, and soldiers were seen rushing into a cave. A stream of fire met all American attempts to enter, and summonses to surrender were ignored. Suddenly a French tank appeared on the scene, waddled towards the entrance, and, nose down, disappeared from view with its guns going. The firing suddenly ceased and the tank backed out, followed by some 500 men, an agreeable surprise for the Americans, who had not expected more than a dozen or two.

But it must not be supposed that there was no hard fighting to be done in this drive towards Soissons. The German resistance stiffened, as it always did after an interval. There were some ravines in the way which gave useful defensive positions.

Both American divisions reached most of their objectives, but they had some rough work at times, especially in the taking of the villages of Vierzy and Berzy-le-Sec. Some regiments suffered heavy losses. One had only 1,500 men left out of 3,400, and 37 officers out of 99. For four days the attack continued, until some of the Americans reached the edge of the plateau whence they could look down on Soissons. The Château-Thierry road was reached on July 21, and the communication with the south was cut. The Americans had earned a well deserved rest, and their thinned divisions were relieved next day.

Meanwhile, the 3rd, 26th and 28th American divisions were engaged farther to the west and south, and were strongly attacking the southern face of the Marne salient. Château-Thierry was the first prize which fell to them. Then they found a harder task before them. The villages of Trugny and Epieds had been strongly fortified. The Germans had been allowed four days in which to prepare defensive measures, and no American could appear in the open without attracting a storm of machine gun bullets. Unfortunately, it was necessary to cross open ground in places. A few men got through the fire, one here and there, but losses were heavy. Some manœuvre had to be thought out. The solution of the difficulty was notably assisted by a motor machine gun battalion. At full speed it dashed towards the enemy's "nests," and, holding its position, it replied to and finally smothered his fire. The two villages were taken on July 24, and the first stage of the struggle for the salient ended.

The next stage, so far as the Americans were concerned, was the taking of the hills above the Ourcq river and the carrying forward of the advance as far as the river Vesle. In these operations four more divisions, the 42nd, the 32nd, the 4th, and the 77th, took part along with those already mentioned. The heights of the Ourcq rise in long ascents from the usually tiny river, and there is very little cover to be found upon them. Every farm was a fortress. The only way to reduce the farm fortresses was patiently to outflank them or to creep up and rush them in the early morning when the defenders' watchfulness was at its lowest. This way was necessarily slow, but it had the advantage of being sure. One by one the woods which barred the advance were cleared of the enemy. In a sudden night attack by the Germans on Grimpettes Wood the young and hitherto untried troops of the 32nd division showed that their

training had been of the right kind. They met the attack with coolness and deliberation, and the fierce efforts of the Germans to snatch a victory from defeat were foiled.

By the beginning of August, the German resistance had been for the moment broken, and the retreat became precipitate. Attempts were being made to find another line on which the shattered divisions could reform, but so hotly did the French and Americans press forward that for some time it appeared as though a break in the whole German line was possible.

The next German stand began, however, sooner than was expected. They did not attempt to hold the defensive line they had prepared south of the river Vesle. Here were found trenches carefully sited, gun emplacements and concrete pill-boxes, all new, but the French and American pressure was too urgent to permit of their being used. The Germans crossed the Vesle and prepared to hold out against the pressure upon the wooded high banks of the river, rising steeply from the stream. This feature, coupled with the narrowness of the valley, gave them a marked advantage over the attacking troops. To begin with, they caught the advancing American columns which emerged from the valley of the Ardre in a costly trap. Misled by the speed of the enemy's retirement, these columns had forced the pace, believing themselves secure. Fismes, on the opposite side of the Vesle, was supposed to have been deserted. In fact, it was full of machine gunners, who were provided for a little while with a splendid target and took deadly advantage of it.

Three days of bitter fighting followed which resulted in establishing the Americans on the banks of the Vesle river. They captured Fismes on the south bank, but the Germans remained in Fismette, the suburb on the opposite bank, and all attempts to cross proved so costly that on August 6 the attack was suspended. But it had achieved all that had been hoped. The Marne salient had been wiped out, and the ground which the Germans had won with such rapidity at the end of May was recovered. Reims was saved and the threat to Paris had ceased to be acute. In two weeks' fighting a victorious enemy had been flung back a distance of almost 30 miles, and the Allied line had been stabilized on a shortened and more defensible front. The American divisions could now be withdrawn, since the French were sufficient to hold the new and much shorter line.

CHAPTER 10

Italy's Recovery on the Piave

THE beginning of 1918 found the Italians, supported by the French and British, holding the line to which they had retired after Caporetto; and during the early spring there was little activity, apart from a few local raids. There were, however, expectations of a grand offensive on the part of the enemy towards the end of May. Von Below had gone to France, and the Austrian army, now under the command of the Austrian field marshal, von Arz, had been strengthened considerably through the addition of troops withdrawn from the eastern front. The reorganization of the army was a measure of national independence. Although it produced a force scarcely half as strong in numbers as the German force, the re-formed army of the dual monarchy was in some ways more powerful.

Germany was opposed by France, the British Commonwealth, the United States and Belgium. Austria-Hungary was opposed in full strength only by Italy. Against the Italians were some 60 divisions, each usually of 10,000 infantrymen, with 7,500 guns. They represented the whole of the first-rate troops remaining in the Hapsburg dominions, the other 21 Austro-Hungarian divisions being either infantry of lower quality or cavalry urgently needed in Russia and other occupied territory.

Field Marshal von Arz was able to plan a tremendous attack upon Italy by 500,000 men, with another 100,000 in immediate reserve and 11 divisions available in the last resource from quiet sectors. In massive effect his plan equalled Ludendorff's greatest schemes. Austria, however, was far more inclined to employ her renewed strength as an instrument for diplomatic victories than as a weapon for a military decision. So grateful and comforting was her sense of recovered power that she was loth to risk it again in the fortune of war.

Her oppressed Slav races—Bohemians, Moravians and men of old Serb stock—were in a fierce mood of revolt, and some of them, in Russia, Greece and Italy, were fighting against her. It was increasingly difficult to keep Slav levies in action. As the

various Slav peoples of the empire outnumbered the ruling Teutons and Magyars, it had never been an easy task to find sufficient soldiers of the governing races to keep Slav forces from surrendering in action. Only from 1915 to 1917 had some of the Slavs of the dual monarchy been prepared to fight against Italy. But when Signor Orlando, after the Caporetto disaster, came to friendly terms with the southern Slavs, a profound though hidden change took place in the Austro-Hungarian army. In this army there were about 25 men of Slav or other oppressed races to every score of men of other stock. Von Arz, therefore, could only rely upon his Teutonic and Hungarian units, and the more he sacrificed them the weaker grew his hold over the rebellious Slav forces. This compensated to some extent for the collapse of Russia, in that, though they were in the enemy lines, 400,000 men were added in this way to the Allied forces. The advisers of the young emperor Charles recognized the change in the situation, and tried to organize the empire into a triple federal system, Teuton, Magyar and Slav. But they were defeated by the magnates whose power and wealth were founded on the oppression of the Slavs of the dual monarchy.

After the destruction of Russia these men were preparing to accept the rule of the Hohenzollern in place of that of the Hapsburg. Yet they had to pay in military strength for their selfishness. Force was their argument, and to obtain striking force the Hungarian troops had to undertake the principal work of attack. Therefore the picked forces of assault available for a grand offensive were not remarkably large. The immense Austro-Hungarian army on the Italian front was magnificent for diplomatic negotiations, but dubious for military action. May, 1918, was originally fixed as the month for opening the intended decisive campaign against Italy. Yet the snow melted from the Alpine slopes, the water in the Piave river swelled to a mile wide torrent and again shrank into a trickling stream and no movement of attack occurred.

Every failure by Ludendorff to reach his objectives in the struggle with the British armies made the Austrian high command less inclined to renew the attack upon Italy. It was not until the French front along the Aisne was broken by Böhn, at the end of May, as abruptly and completely as the British front by St. Quentin was broken by Hutier in the third week of March, that the men about the emperor Charles took a fateful decision.

Ludendorff's staff ambassadors exploited fully the moral effects of the great western successes. The able Austrian high command had only to use the same method again, while Foch's mass of manœuvre was absorbed in the defence of Paris, and Italy, with all her imported food stocks, growing crops and glorious treasures, would lie at the foot of her former conquerors.

In the meantime Ludendorff prepared the way for a great Austrian victory by launching Hutier's armies in an offensive that engaged the Allied reserves in France and made it difficult for General Foch to send, in the middle of June, 1918, any further reinforcements to Italy. This was all the German commander could achieve in the circumstances, and it fell much below his earlier promises. For he had first arranged to dispatch Otto von Below with another 100,000 shock troops to break far behind the Italian front from the western side of the Trentino. The British 3rd and 1st armies had intervened in this scheme, leaving Below too severely maimed to move, so Ludendorff had to pretend he was destroying Foch's mass of manœuvre, as a better alternative to the dispatch of shock divisions, likely to be followed by French, British, and American reinforcements to Italy. Having regard to the fact that Hutier's new offensive was completely mastered by General Mangin's counter-offensive on the Méry plateau by June 11, it is clear that Field Marshal von Arz was, at the critical moment, deceived in his view of the complexion of affairs in the west.

The Austrian offensive opened with an attempted surprise against the left Italian flank by the Swiss frontier. At dawn on June 13 the scanty outposts on the wild heights about the Tonale pass were assailed by a division of shock troops. The attacking force was brought up the Alpine valley with the usual secret swiftness in motor-lorries, and sent up the mountains under cover of mist. The ground allowed only a small force to be employed, but when the pass was rushed, with the upper valley approach to the plain of Lombardy, other troops were ready to exploit the advantages gained.

The brigades advanced in columns that spread into a succession of storming parties, and in rapid trickling movements, according to the best Ludendorffian pattern, tried to work over the northern Alpine ramparts of Lombardy, between the Orteler and the Adamello glaciers. They were set to win the high gate to Italy by the evening. They won nothing but appalling death.

Caught on the mountain ledges and high counterscarps by raking, crossing machine gun fire, swept by gusts of shrapnel when they topped a crest, they tumbled by hundreds into the hollows beneath the Alps.

After sacrificing one of his best divisions against the remote end of the Italian line the enemy commander hoped at least to distract an important defending force from the scene of his main effort. But his feints were as vain as his great scheme of camouflage. General Diaz knew at what points von Arz would strike, and at what hour. One very able Slav officer had discovered the entire scheme of the attack, and had then communicated the details to the Italian staff. As revealed to the Italian command the enemy's design was simple and massive. It consisted in an immense frontal attack on a line of 43 miles along the Piave river and the heights rimming the Venetian plain above Asolo, Bassano and Vicenza. The merit of the straightforward, commonplace Austrian scheme was that it allowed an intense artillery concentration, with terrific cross-firing effects, upon the weak bend in the Italian line by Monte Grappa. On the heights thus swept on front, flank and rear the Italians, British and French could not afford to retire to a battle position and let the enemy waste his shell. They were so close to the plain, having been pushed to the edge of the mountain wall in previous attacks, that they had to stand to battle against any forces the enemy brought against them.

Their commander, however, was able to save his men and Allies on the critical mountain flank. In the night of June 14 the Italian, French and British guns made a sudden whirlwind bombardment of the enemy's line from the Piave river corner to the Asiago plateau. Between these points the armies of Field Marshal Conrad von Hötzendorff and General von Scheuchenstuel were thronging into assembly trenches under cover of a misty night. The Allied blasts of fire, travelling deep into the hostile zone, had a disordering effect. Enemy battery positions and gun crews were caught unaware with gas-shell, and the crowded works in the infantry lines were shattered with high explosive.

The work of preparing a grand offensive along a front of 43 miles was an intricate affair. Every movement must be exactly time-tabled, and if one faltered a series of connecting movements was deranged. The battle opened on the morning of June 15 when, in accordance with the usual methods of Ludendorff, the

Austrian batteries opened fire with gas-shells. The bombardment was on an enormous scale, and the Italian lines were shelled from Lagarina to the sea. Special artillery was also utilized for shelling the towns and villages behind the battle front. But the Italians were well prepared for the attack. For one thing, the india-rubber gas-masks which had become by this time part of the standard equipment of the Allied troops afforded an efficient protection against the gas used, so that the results achieved by the enemy's bombardment were far less devastating than they would have been had they used high explosive shell. Thus, from the outset one element of surprise in Ludendorff's system of tactics was rendered only partially effective. At about six o'clock in the morning the Austrians then started their advance. The mountain line was swathed in mists, and the attacking infantry brought into play all those devices which had been developed by the Germans for service in such situations; trench mortars hurled smoke bombs on and around the Allied machine gun emplacements, and the mist from mist-making machines combined with the rolling white clouds from shells to cover the unified forward movement of the Austrian troops.

At the time of this attack the British forces, under Lord Cavan, were in the old German territory of the Seven Communes of Asiago. They consisted of the 23rd and 48th divisions, and against them were opposed four Austrian divisions. The British troops had a vital duty to perform at this point of the line in that they were to act as the extreme pivoting force of the defence, and, like the Lancashire division at Givenchy, hold the enemy from encroaching on the plain behind. The landscape in the area occupied by the British force placed them in a position where they were not easily attacked. Extending for about seven and a half miles, their line was emplaced in a wide basin of rolling country, encircled by the last high foot-hills of the Alpine system. On the left they linked with the defences of an Alpine corps, and on the right they joined the Franco-Italian positions which stretched to the Brenta river. Before them lay about three miles of mountainous country, and immediately in front of the first battle position there was a steep incline covered with pine trees.

Under cover of barrage fire and his shroud of artificial mist the Austrian commander moved his men forward. From his methods it appeared that he reckoned on meeting an enemy force of only meagre dimensions. This supposition was strengthened by the

fact that a British brigade had lost a man on patrol at one end of the line, and afterwards had another man killed on patrol at the opposite extremity, to which the brigade was suddenly shifted. It thus appeared that there were only a few British battalions, thinned out as an advanced guard, and that the main battle would be fought on the crests in the British rear. Thereupon the Austrian command devised the manœuvre of pressing the supposed British covering force back to the high crests, advancing down the Cesuna valley, and winning space from which decisive flanking attacks could be launched against the Franco-Italian positions on the eastern side of the Asiago basin. Should the French and Italian force give way the Brenta would be won, enabling the mountain rampart above Asolo to be turned, and therewith the main Italian line along the Piave.

But it was not long before the enemy realized how greatly he had underestimated the strength of the British line, for along the greater part of it 40,000 Austrians were caught in the curtain fire of the guns of the defence and raked by the machine guns and rifles on the concealed infantry positions in the forest. On the front of the 23rd division the attack was completely repulsed, and though the 48th division, holding the western sector, lost some ground in the valley approach, the enemy was held by the switch trench system, and there broken.

At one point the Sherwood Foresters were obliged to give ground, but without waiting for supports they rallied in a splendid counter-attack and restored their front. The only serious gap was made near the Cesuna hollow, where an Oxford and Bucks battalion was facing an awkward rise of ground. Behind this rise an entire enemy division massed, and by driving through a screen of smoke forced back both flanks of the men of Oxfordshire and Buckinghamshire. The Northumberland Fusiliers bent their flank back to keep in touch with their half surrounded comrades, and a great struggle opened amid the pine trees, where there was little clear space for machine gunners and riflemen to act on either side. The men had to fight with bomb and bayonet in a salient 1,000 yards deep, running up the columned twilight of the climbing pine wood, fiercely assailed on three sides by 10 times their own number. When in the night the Warwicks came up to help the Oxford and Bucks and made a smashing counter-charge on the flank of the salient, it was a completely beaten army that fled in panic with the British in pursuit.

The French forces—below the Sisemol height, connecting with the Italian army by Costalunga—gave ground as soon as the enemy's pressure was fully felt; then, when the Austrian divisions were crowding into the front positions, the French light batteries opened their rolling fire and the French infantry came forward with the bayonet.

The difference in British and French tactics must have been a trial for the Austrians, as they were not, like the Germans, accustomed to the varying methods of the western Allies. The French still used their small field guns like machine guns, having been, early in the war, the originators of the elastic system of defence that Ludendorff afterwards developed. There was veritable and instant elasticity in their flexible line. All the Austrian imitations of Ludendorff's tactics—scouting parties of sharpshooters, worming bodies of machine gunners, detachments using long-distance covering rifle fire, and lastly the dense, successive waves—were overwhelmed in common confusion.

The Austrian official report on the Asiago battle ran:

> In the forested zone of Asiago our regiments encountered a mass of attack which had been preparing for action some days previously. Their counter-attacks compelled us to withdraw from part of the ground we conquered.

Later it was learned from prisoners taken after the action that attempts made to rally the broken, dispirited forces of Austrians and Hungarians led to violent disorders, which threatened to end in a mutiny so general that operations were brought to a close.

The Italian forces in the Seven Communes were as successful as their comrades. Their gunners gave skilful assistance to the British flank, where their Alpine troops were also of high service as a reserve to Lord Cavan's 48th division. By the Brenta river there was an enormous concentration of artillery and infantry of the attack. While the British and French contingents were fully engaged the main forces of the Austro-Hungarian 11th army, under General von Scheuchenstuel, were driving against the high salients held by the Italians on both sides of the Frenzela ravine. In magnificent tenacity the Italian army excelled itself now. The troops were compelled to give ground, under the fire of 1,000 guns which, massing upon some four miles of mountainous land, broke a path for an unceasing swarm of attacking troops. Yet even when the Italian line bent, bodies of men still remained on the lost heights, islanded in a sea of enemies.

The river positions by Valstagna held, when the line gave eastward over the Brenta, and on the Asiago forested mountains the army of assault was counter-attacked. The Frenchmen moved forward on their right towards the Costalunga spur, in cooperation with the Italians, who won back ground in prolonged day and night fighting between the Frenzela ravine and the Melago valley. It was a complete victory for the defending forces.

Meanwhile, the unaided Italian 4th army was entrenched between the Brenta and Piave on the mountains, ridges and slopes to which it had made a fighting retreat the previous autumn. Its front ran in a series of salients which had been retained by Italians and Frenchmen in the former battle. At Monfenera there was only an edge of high ground, with a quick incline to Asolo.

Asolo with its hills, filling the gap between the northern Grappa mountain rampart and the eastern riverside ridge of the Montello, was a mighty artillery position on the side of the defence, that strengthened the forces clinging to the Monfenera ridge and the garrison of the Montello. Yet its guns could not prevent the more numerous enemy batteries across the river from taking the right wing of the Italian 4th army in the rear, cutting off supplies and reserves, and, with the great northern arc of hostile ordnance, ringing it with shell fire. The Austrians had brought their heaviest siege guns forward in astonishing number —in thousands—exceeding in concentration of gun power even Ludendorff's most intense effort. By devastating gun fire, poured in from two sides, the enemy commander swept some of the Italian garrisons away. His own infantry then broke far into the Grappa front, and the Allies' main positions on the Asiago upland were in danger of being turned.

The leading invaders were checked, but this did not stay the onward mass movement. Only the forefield of the battle had, however, been taken. The Italian commander had his reserves in sheltered positions, and as they came rapidly into action all the line rallied, and, with a new-won enthusiasm, charged upon the enemy. This was not an heroic improvization but a manœuvre organized long before the battle by much study, engineering work, and the special training of troops.

The whole of the 4th army, tired troops as well as fresh troops, executed the counter-offensive. Preceded by a finely devised system of flanking gun fire, they fought back to the Moschin

ridge, saving the men on the Asiago sector from being outflanked. Then, with the Brenta front reconsolidated, they swung round the Grappa and recovered its outworks on the Asolone and the Orso heights.

All this was done on a very misty day, in which aerial observation was at first very difficult and at last impossible. Nearly all the Allied machines left the mountain battle-line because the air was so thick they could not work there, and passed along the Lower Piave, where the atmosphere was somewhat clearer. Observing officers on the Grappa crests could not follow the action in the shrouded hollows, and when the darkness of night completed the obscurity the task of maintaining the recovered initiative taxed the resources of all the Italian officers. Yet the initiative was retained in spite of the new masses of troops that Conrad von Hötzendorff, directing Austrian operations on the Grappa front, wildly poured forth all night. His men were disheartened. They had been promised an abundance of captured food, and when, after horrible fighting, their picked divisions fell back to their own lines with half their strength gone, the reserves of lower quality that relieved them were in no mood of aggressiveness. They allowed Italian patrols to recover the original machine gun outposts, and only the weight of the Austrian artillery prevented successful counter-thrusts.

There was, however, another factor of caution in addition to the enemy's massive gun power. The situation of the main Italian forces along the Piave river line was not so strong as that of the victorious defenders of the mountain front. Von Arz had arrayed two mighty armies between the Montello curve of the Piave in the north and the seaward bend by Capa Sile and the lagoons and marshes above Venice in the south. The Archduke Joseph nominally commanded in the Montello action, and behind him was the greatest of all the concentrations of the 7,500 guns.

The scheme of attack on the Montello, by reason of the immense machinery behind it, was sound and very promising. Sir Herbert Plumer, an expert in storming ridges and defending them, had transformed the last great hump of earth between Venice and the enemy into an inland Gibraltar. When he returned to Flanders the capable engineers of Italy went on with the task of consolidating and strengthening the works. The ridge was some seven and a half miles long, with a height of 700 feet in the middle, increasing to more than 1,000 feet at the western

end. It was the hinge of the defence. If it fell Venice fell with it, and with Venice the means of commanding the northern Adriatic waters.

The weatherwise enemy began the struggle with many advantages. He raked the nearest slopes with high explosive, and flooded all hollows likely to contain guns with poison gas. Then, while his smoke screens were thickening the nocturnal haze, he bathed the long ridge and its communications with tear gas. Observation power was, under the conditions of modern warfare, the great virtue attaching to the occupation of the height, and by selecting a misty night and using blinding gas in stupendous volume the Austrain commander designed to make his overwhelming infantry forces tell in decisive fashion.

The first part of his scheme was successfully carried out. On June 15, over the shrunken Piave at Nervesa, his troops crossed in a screen of dense smoke, and in a double movement reached both the northern and southern sides of the promontory. Pushing out sharpshooters and machine gunners, the two forces united on the summit above Nervesa, and tried to sweep the ridge from east to west.

When day dawned the enemy had a floating bridge and a great traffic of small boats on the Piave, and two crack storming divisions holding and widening their bridge-heads on the high granite fortress of Italy. The attackers had no artillery with them, but they captured many Italian guns in the forward position, and their promising success was immediately supported by a movement in huge numbers to force another passage of the river on a front of some 10 miles below the Montello. By this time the Piave line had been bent on the southernmost sector, by the lagoon and lake defences of Venice and by the road and line running to the Treviso junction of communications. The strain on the defence seemed intolerable, and von Arz issued orders that progress was rapidly to be made across the Piave at any cost in life. All reserves were rushed to the archduke's army group, and to Wurm's army that had won several bridge-heads on the Venice front.

Diaz and his lieutenants counter-attacked most strongly on the southern side of the Montello, a little distance from Nervesa, pinning the invaders between the Brentella stream and the Piave. Their troops also threw the enemy back along the middle reaches

of the river. Ground was given only by the seaward marshes, 14 miles from Venice, and along the northern side of the Montello, eight miles from Asolo. The Italians were full of splendid daring and subtle fierceness; and from the 24 roads that crossed the Montello from north to south they took the swarming enemy frequently by surprise, in spite of his scouting patrols and linked machine gun posts. Weatherwise was the Italian staff as well as the Austrian. When mist came down from the Alps to the seaward plain in early summer, long, heavy rain was likely to follow. Field Marshal von Arz had based his attack upon the opportunity of mist; General Diaz, in turn, was founding his defence upon the certainty of rain.

Absolute command of the air was his immediate need. British, French and American squadrons joined the numerous Italian airmen over the Piave, and cleared the low-hanging sky of swarms of enemy machines. Then in the haze and the rain the Allied bombing aeroplanes and aerial machine gunners conducted a remarkable struggle for the river. As fast as bridges were constructed they were destroyed. On June 16 the rain began to wash the snow down from the Alps, and all the hostile forces soon saw that they were set in a race against the rising torrent. This was the reason why the Austrian sappers worked with amazing energy and determination against squadrons that broke their bridges and why Wurm and Kirchbach and other southern army commanders spent their entire strength in the maze of river works and the labyrinthine marsh and lagoon system. The southern forces were trying to save the army of the archduke by a releasing turning movement on Treviso. But every thrust they made was answered by a counter-thrust. When the Austrian official report was loud with praise of the Slav elements in the army of assault, Bohemians and Moravians were victoriously charging their oppressors between the Sile stream and the Piave and saving Treviso.

The Austrian and Hungarian leaders made many attempts to deal with their unwilling Slav troops. Under machine gun pressure the men were shepherded into line for attack, where field guns were laid on them by way of persuading them to fight forward. Those who escaped surrendered to their new allies the Italians. Consequently, only the men of the dominant races could be efficiently used, and it was the Hungarians who were sacrificed. It was partly done because they were stout fighting men.

likely to force the Italian line; but, as was afterwards angrily observed in the Hungarian parliament, there seemed to have been dark reasons of state as well as military urgencies in the orders that sent the last strong multitudes of Magyars to their death. The Magyars fought bitterly. In the south they won, by June 17, a three mile salient and a long strip of the western bank of the river. Instantly the special assault troops of Italy, the Arditi, drove into the northern side of the small wedge, while powerful Italian naval guns on floating platforms lower down the river broke the bridges behind the sodden, cheerless, ill-supplied attackers. When only two foot-bridges remained the Hungarian engineers constructed a cable ferry by San Dona, but could not get reinforcements and supplies over in time to strengthen their weakening forces.

In continuous battle from the Treviso approaches to the lagoons, General Wurm endeavoured to relieve the royal army on the Montello. By June 19 he gained a somewhat longer strip of the western bank, but the more men he passed over the swelling river the more his difficulties increased. The Piave was the governing force on the field of battle. On the wide, deep torrent the pine trees came down from the Alpine slopes with torpedo-like effect. They smashed into the enemy's light bridges, over which some 25 divisions at last had to be fed and munitioned. So long as the enemy was attacking, sky, river, and Alps fought for Italy. When the enemy was defeated the sky cleared, the river fell as quickly as it had risen, and the Alpine forests ceased to send down their missile pines.

The enemy high command announced that "the fall of the greater part of the Piave front" had taken place on June 19, which was the day of supreme triumphant progress for the Italians. The army of the Archduke Joseph was then covering the northern half of the Montello and stretching to the railway from Montebelluna. Its position was menacing in appearance, but weak in reality, and by converging routes the Pisa brigade, with Aosto, Piedmont and other forces, struck across the ridge and along its southern foot.

In storming columns the Italians worked, submitting to no check and striking mainly across unfortified ground, where the Magyars had little or no cover. Italian gunners, who had lost their pieces in the early action, accompanied the infantry of attack, bringing ammunition for the guns they were certain

would be recovered. Many of these guns were won back before the enemy could destroy them, and employed once more against him. By the evening the Hungarians were pushed into a salient on the north-eastern part of the ridge, and there were more slowly slaughtered by artillery fire and aerial bombardment. There was also a success at Zenson, on the lower course of the river where the cavalry of Milan and a lancer regiment finally decided the fortunes of the action for the Venice line by a night counter-charge that drove the enemy to the waterside.

With dawn on June 21 came the moment for which General Diaz had worked with the patience and science of a great commander. The enemy had employed about 45 divisions. Of these more than one-third were killed, drowned or wounded, and the rest of those still in action on the western bank of the Piave were weary and depressed. During the greater part of the three days of the fighting there had been much rain and mist. But the weather was beginning to improve. While this may have been welcomed by the Italian soldiers, their commanders were not pleased with the change; the waters of the Piave were falling, and by June 22 the river was fordable in some places so that the Austrians, who would before the change of weather have needed foot-bridges to reach their lines, were able to wade back. The chance of turning the Austrians' grave position into a decisive disaster slipped away as the swollen Piave fell.

Soon after midnight on the 22nd the Austrians seized the earliest opportunity to retire to the eastern bank. Rearguards were left to cover the removal or destruction of heavy material. On the ridge at daylight Italian patrols discovered what was taking place, and an attack was launched that saved the last of the lost guns from being blown away by the enemy. Many of the pieces were full of explosive when recovered, but the Magyars fled without firing the charges, and left a few of their own guns behind. By the river, prisoners were taken as they tried to push off in boats, and the Italian cavalry crossed the water and raided the country towards Conegliano. But there was no real pursuit beyond the river-line. The hostile artillery remained very formidable, little of it being lost owing to the impossibility of transporting the pieces over the Piave during the first phase of the action. The San Dona salient was then evacuated, and by June 25 there were no enemy forces on the western bank of the river, except some 20,000 prisoners, of which

a considerable proportion were Slav soldiers who had willingly surrendered.

The Austrians had conducted their retreat with skill, and their forces were still formidable. General Diaz wisely refrained, therefore, from attempting to exploit his victory by pushing on across the river. But the moral effect of the Italian victory was profound. In Austria it led to riots; in Hungary to a serious attempt at a general strike, and the reactionary ministry dissolved into a government of official Micawbers, which, while waiting for something to turn up, was bankrupt of ideas and palsied in power. Skoda, the gunmaker, remained the best servant of the Hapsburgs. His artillery was a framework of steel on which the army was again reconstructed and carefully conserved.

On the other hand, in Italy a people already welded by reverse was annealed by triumph. To its strength was added resilience. Grimness went, and a blithe courage allowing a play of mind with an inventive audacity, which made the Latin race again an incalculable force, took its place. To France, Great Britain, and the United States the success of Italy over her ancient foe brought both inspiration and succour. It relieved the tension of spirit, and enabled Marshal Foch to use the mass of manœuvre he had been keeping in hand for all eventualities between the North Sea and the Adriatic, in a stroke that changed the course of the war in the principal theatre of conflict. By the fine economy of force by which he had won a great victory General Diaz directly contributed to the recovery of the Allies' striking power on the common front, and opened the way for the glorious series of advances that began in August, 1918, and ended in the collapse of Austria-Hungary and the conclusion of an armistice early in November. The few weeks between the successes that have been recorded and the beginning of the new advance were occupied in bringing up reinforcements of men and fresh supplies of material and in general in preparing for what was to prove the final campaign.

CHAPTER 11

Second Battle of the Marne

After the fighting on the Aisne in June, 1918, culminating in the victory of the French tanks at Méry, which was a staggering blow to the German commander, Ludendorff waited for General Foch to reveal his strength in some other sector, confident that he had preserved sufficient reserves to stand firm in his own battle positions. There were several weak sides to the German salients, new and old, at which the Allied commander could have struck with effect. But he saw no reason for using men up in attack and immobilizing them. He could wait until the United States forces served to balance the total German forces in the west and allow a larger margin of manœuvring power. In the meantime, it was for Ludendorff to move.

The German commander tried to escape from his difficulties by inducing the Austrian high command to open a grand offensive on the Italian front. He hoped that it would result in a sudden call upon important divisions of Foch's army of reserve. But by the end of June it was clear that the Austro-Hungarian army could not disturb the plan of operations which the captain of the entente Powers was calmly pursuing. Italy was an increasing source of strength instead of a factor of weakness to her Allies, and Italian soldiers took over part of the French line by Reims, as also did the United States troops.

Ludendorff had to attack or retreat. At the beginning of July the American troops nibbled at the corner of the Marne salient at Vaux ; in the second week the French 1st army nibbled at the Amiens line at Cassel, while the active Australians were developing important advantages which they had won at Hamel and along the Somme. On July 15 the German commander-in-chief launched the last of his great offensives, with the remaining surplus of capital in man-power and matériel with which the Bolshevist dictators of Russia had provided him. His front of attack extended for 50 miles, from Château-Thierry to the Champagne down known as the Hand of Massiges. On the Marne line General von Böhn endeavoured to reach in force

across the river valley and carry the Mountain of Reims. On the Champagne line General von Mudra, who succeeded Haeseler at Verdun in 1916, and General von Einem, who had long held the downland country, tried to break through the lines of General Gouraud, while Böhn turned his flank below Reims.

The principal and frontal assault by the reinforced army groups of Mudra and Einem cost Germany more than any action she had lost since Auerstädt. It was the new Auerstädt, of which, it seemed, the sequel of a new Jena was gradually to follow. General Gouraud won by a trick as simple in seeming as a throwing turn of the hand from an expert wrestler, and as difficult. Unknown to the enemy, he drew back his line from the strong system of hills which had been slowly gained by his predecessors in the Champagne command by costly offensives. He abandoned the Moronvilliers heights, Auberive, Tahure down, and the Hand of Massiges. He left only a thin screen of dauntless volunteers to deceive the enemy and check the forces of assault. His army fell back to Prunay, Prosnes, Souain and Le Mesnil, with his guns covering all the ground evacuated.

The German bombardment was of marvellous intensity. The lost hills were searched most cleverly, and battered and stained with patterned explosions and torrents of poison. Having been the originators of the works upon the heights, the Germans knew where the resistance was likely to be strongest, and concentrated their howitzer fire accordingly. It looked as if none could survive Ludendorff's artillery efforts. He claimed to have taken more than 1,000 guns from the French and British since the last week in May, and he certainly had captured hundreds, with a store of half a million shells. His complete tale of artillery, taken in battle or acquired through the defection of the Russian army, was staggering, and there had been time to replace breech blocks and damaged parts of many captured pieces. Yet not only did the main French forces, with their Italian and American contingents, suffer little loss, but the advanced guards lived through the terrific bombardments.

When the German infantry cautiously came forward to explore before the drives in mass were made, the French forlorn hopes produced a telling imitation of a broken army making a last defence. Some were quickly surrounded, and fought to the death; others managed to carry out the programme of a fighting step-by-step retirement, which gave the last touch to the scheme

of deception. Out into the open ground swarmed the shock divisions, numbering 15, with 10 ordinary divisions behind them to carry on their work, and 15 more in reserve. Then as the Germans, working apparently against ordinary opposition, reached their line of doom, parks of quick-firers raked them in front and curtained them in the rear, while a great, fixed howitzer barrage shut down between their lines and the original French positions. Dislocated by the French machine gunners in the advanced posts, the leading masses of 100,000 Germans withered under the unexpected shell fire which caught them when they thought they were standing victorious upon the main French line.

The disorder in which the German masses were thrown was so complete that the French advance guards, in their 30-foot caverns, often became encumbered with prisoners. Prisoners were also taken in the tunnels extending from General Gouraud's battle system. Shelter at any price was what the Germans sought when their tanks were smashed around them and they themselves were broken and routed by the fire of the French guns and the machine-gun barrages of the defending troops. Only at Perthes and at Prunay, by the marsh of the Vesle, were the French battle positions reached in any force by remnants of the German masses. On the Moronvilliers ridge, the French foreground block-houses, held by only two or three machine gunners, broke the waves of assault for two hours or more. At least one of these posts was holding out at five o'clock in the evening, after a struggle that had lasted for more than 12 hours.

General Gouraud was heavily outnumbered, there being 250,000 enemy effectives immediately deployed against his line; but when night fell the new wire entanglements which he had secretly erected in front of his withdrawn positions were for long stretches littered with German corpses. At least 50,000 Germans were killed or wounded out of a total deployed force of 250,000. The French sappers had placed the new wire fields by the pine woods on the Champagne downs, so that the fire of concealed machine guns and field guns converged upon the close formations with which the enemy endeavoured to carry the main French line. Some of the slight dents in the French line were quickly straightened, and the French troops, amazed at the ease with which they had won a decisive victory of defence, cheered their commander when he reviewed them. From the cellars of Reims, which they had saved, thousands of bottles of fine wine

were provided to all the troops by the grateful vintners. The total French losses, including the men who sacrificed themselves to hold the front line positions, were light in comparison with the effects on the man-power of Germany. There was not a French division that needed to be relieved.

At first the tremendous importance of the victory of the army of Champagne was not discerned by the general mind. Its significance was largely a technical affair of staff calculations as to enemy effectives remaining fit for immediate action, and of British and American reinforcements of untried troops, whose quality was still unknown to German headquarters. General Foch and his lieutenants alone possessed full knowledge of all the elements of the situation, and while Ludendorff was still hoping for a victory on the French centre, the Allied commanders prepared one of the greatest surprises of the campaign.

General von Böhn was at the time cooperating with extraordinary energy with Generals von Einem and von Mudra. At great labour the conqueror of the Aisne plateau had organized an offensive along the Marne. The work was carried out with a speed and power astonishing in the circumstances ; for in spite of his bad communications Böhn succeeded in bringing into action as many troops as Einem and Mudra handled. In the early morning of July 15 he opened on the Marne front as stupendous a cannonade as his fellow-generals employed against the Champagne downland. Between Château-Thierry and the western slopes of the Mountain of Reims his massed guns dominated the broad, shallow valley of the Marne. The French and American advanced guards, while maintaining a strong resistance, fell back, and by light bridges and boats the Germans crossed the river and formed protecting bridge-heads, while many pontoon bridges were erected between Fossoy and Dormans. As in Champagne, the French battle line had been withdrawn, and many of the light field guns and all the machine guns of the defence were concealed during the terrific artillery duel. They came into action only when the masses of German infantry were clearly visible behind the skirmishing, exploring lines of machine gunners and sharpshooters.

General Berthelot, commanding along the Marne, had designed a subtler trap for the enemy than General Gouraud was working. He wanted the Germans to cross the Marne, and therefore met them there with a covering force of infantry and artillery that

gave ground during the course of the day to a depth of some three miles immediately west of the town of Epernay. Epernay and Montmirail were the objectives Böhn expected to attain in the course of a day with his reorganized army of 250,000 men, and it might have been worth while to let him approach closer to the scenes of old French victories in view of the design which General Mestre, directing the three Allied armies around the Marne salient, was working out.

Scarcely enough ground was offered the Germans as a bait, especially in the direction of Montmirail. Here the United States troops counter-attacked with great fury, driving the enemy back to the river. On the other hand, General Foch and General Mestre had to play their game with extreme caution in the opening phase, and until they were absolutely certain that Gouraud's victory on the Champagne front was decisive they could not give Ludendorff another large opening nearer Paris for the employment of his divisions of reserve. There were in all some 84 German divisions directly engaged in the offensive or ready to come into action—in fact, almost half the German forces in the west.

As soon, however, as the success of Gouraud's strategy was confirmed Böhn was allowed, within limits, to develop the advantages which he seemed to have won in forcing the passage of the Marne. He was checked on his wings by the vine-clad hills of Condé and by the western slopes of the Mountain of Reims; but his central masses, consisting of eight divisions which had crossed the Marne and a similar force working above the river in the direction of the upland behind Reims, won some six and a quarter miles of ground by the evening of July 16.

The ground, however, was not really won; it was given. General Mestre and General Berthelot held the southern approaches to Epernay merely with the best retreating division in the French army. It was formed of the hussars, dragoons and other dismounted cavalrymen who had shielded the Irishmen, Scotsmen and Englishmen of the 5th army in the action around Roye and Montdidier in March, and broken the German offensive along the Avre, afterwards rearguarding between Fismes and the Marne the broken French centre in May and June. These gallant and skilful dismounted horsemen were arrayed by Montvoisin to act in an elastic way and encourage the enemy while really holding him.

There was some danger to the Franco-Italian line below Reims, but it was more apparent than real, as a splendid Scottish and English force was available as a reserve if urgently required. General Mestre, however, did not wish to use the British divisions in defensive work, and he therefore gave more ground for strategic purpose than he need have done under compulsion. In the result, he induced one of the most remarkable congestions of enemy forces known in history. Ludendorff, perturbed by the failure of the Champagne offensive and the decisive though veiled defeat of his Marne operations, misunderstood the general situation. Following his old course of shifting enormous masses against a weakening sector, he directed General von Mudra to cease action on the Champagne front and swing his remaining reserves westward of Reims to cooperate with the eight divisions that Böhn had passed over the Marne. At the same time some 10 picked divisions were borrowed from the armies of the crown prince of Bavaria and transported with all speed to Laon, whence a railway ran towards Missy.

While this fresh army from the north, brought up to the strength of 14 divisions under General von Eben, was still on its way south, Mudra and Böhn made a tremendous combined effort to win the ground between Reims and Château-Thierry, which Ludendorff required for the final attempt to carry Reims and its mountain and Epernay, and drive deep upon the flank of General Gouraud's forces, while thrusting towards Paris. There was terrible fighting on the slopes of the Mountain of Reims, against which Mudra's troops poured along the valley of the Ardre. The Italians lost Pourcy, rallied, and recovered the village. Hill 265, forming the outer work of Epernay, was also lost and regained by the French, and all the Allied line, including the important sector held by the American troops, swayed under the tremendous shock of extraordinary masses of the German armies.

On the morning of July 18 some of the German troops were still fighting with the utmost violence on the Mountain of Reims, more than 30 miles in direct line from their railway base by Missy, on the Aisne. In the Marne salient were at least 33 German divisions, with bad communications and in difficult country, exposed to continual aerial attack and long range fire, and thrown along the fighting front into confusion and dismay by the massacring they had endured. In the night there was a great thunderstorm, drowning the noise of the engines of the

great counter-offensive which the Allied commander was launching. General Mangin, who had conducted on the Méry upland below Montdidier the first important light tank operations on the French side, had secretly been gathering a French, African and American mass of manœuvre under cover of the forests of Compiègne and Villers-Cotterets. With this army were tanks in extraordinary number. General Mangin was able to employ them against infantry as armoured knights had been used in the Middle Ages against unprotected pikemen. Below Mangin's army was another strong striking force of Frenchmen and Americans, under General Degoutte, who also had a large number of tanks, including many British whippet tanks.

Covered by the thunderstorm and screened by the rain, the two Franco-American armies broke into General von Böhn's western defensive flank between the Aisne and the Marne. Böhn had expected a strong attack in this direction. With the idea of making sure that his offensive operations would not be checked by a drive into his flank threatening the roads and the railway in his rear, the German commander had erected a double chain of hill fortresses from the plateau below Soissons to the heights around Château-Thierry. This front of 27 miles was held by first-rate divisions alined in great depth. But the weight and speed of the Allied tank assault, especially in the northern sectors, completely upset all the German preparations.

General Mangin's army had the more important work and the greater striking power. No artillery preparation was made. When the troops advanced in the thunderstorm the French and American artillery used a rolling barrage, behind which tanks, infantry and cavalry rushed the German defences with staggering effect. On the northern edge of the new battlefield, Paris hill and the upland dominating Soissons were carried, and the outskirts of the city reached by exploring patrols. Vauxbuin was stormed, and below this important village the attack was pushed over the Soissons-Château-Thierry road to the Crise stream. An American division took Vierzy and made a further advance of three miles, cutting the neck of the German communications in the crowded Marne "pocket."

The German line was broken as far as Buzancy, and Allied cavalry forces were working in the German rear some 30 miles behind the hostile fighting front south of the Marne. The enemy's local reserves had in places to come into action

without artillery, and were overrun by the tanks and the accompanying cavalry. Below the Ourcq river the Franco-American army of General Degoutte also drove beyond its objectives. The Americans took Torcy in 40 minutes, reached beyond Belleau Wood, famous for an action in which the American marines had shown their high quality, conquered Givry, and progressed beyond it. There was a fine American charge through Cresnes Wood, and a magnificent feat of arms at Courchamps. The southernmost thrust, directed by General de Mitry, who had held the line along the Avre in the March offensive, brought the United States force into a dominating position around Château-Thierry.

Above General de Mitry's forces the rest of Degoutte's army fought along the Ourcq towards Neuilly St. Front, threatening the centre of the German communications at Oulchy. This part of the Allied operations was, however, contributory to General Mangin's drive below Soissons. The southern army was farther away from the German line of communications, and its success served the purpose of holding General von Böhn's troops and preventing them from hastening backward to meet Mangin's men. Similar fierce holding actions were opened by General Berthelot along the Marne and by the Mountain of Reims, with the same design to check both Böhn and Mudra from moving troops back towards the gap by the Aisne. Yet the gap was filled. Eben's new army came into action in the evening, and by close, desperate fighting with massed columns against the French and American advanced forces, recovered some of the high ground about Buzancy, and cleared the Soissons-Château-Thierry road by a stubborn action on the Hartennes plateau and the ridge of Grand Rozoy.

At the end of the great German counter-attack the French, African and American troops still held the heights by Soissons, together with the Chaudun plateau and the hill of Vierzy, with a series of important positions running down to the Ourcq river above Neuilly. Great in numbers as was the new German army suddenly interposed between the bankrupt forces of Hutier and the imperilled masses of Böhn, it was unable to rob Mangin's men of one of the most important victories in the war.

The advent of new German forces had not been unexpected. All that had been hoped was that General Mangin might consolidate himself on the conquered positions before the enemy's

counter-attack opened. When it was clear that this could not be accomplished, General Mestre, working with General Fayolle and General Pétain under the Allied commander-in-chief, devised a more subtle, slower and larger plan of action. Ludendorff had saved the armies of Böhn only by sacrificing the new army of Eben, and bringing the number of German divisions in the Marne "pocket" to 49 or 50. With the continual reinforcements received from the half-shattered forces on the Champagne front there were about 500,000 Germans in the triangle of Soissons-Château-Thierry and Reims. Some of these Germans were dead, some of them were wounded, and some had been lost by capture. Yet the remaining total of men of all arms and services still approached 400,000, owing to the large reinforcements received from other parts of the western front. In direct line the distance between Soissons and Reims was about 40 miles, and the distance between Soissons and the southernmost point of the salient below the Marne was 30 miles.

The organization required to push 400,000 men into this angle of ridged and tortuous country, and provide them there with water, food and ammunition, was tremendous. The Germans had made new roads across the valleys, and had profited by the routes constructed by the French for their Aisne offensive of 1917; but every road required several bridges and ran over exposed places, and the concentrated aerial forces of France, Britain and the United States bombed by night and day everything visible between the Aisne and the Marne and Laon and the Aisne.

In the meantime General Mangin's army was strengthened and General Berthelot was given fresh forces, and the struggle for the initiative between Foch and Ludendorff was resumed. The critical fight was concentrated on the two corner sectors by the Crise stream and the Ardre stream. Here General Foch supplied Mangin and Berthelot with the means of intensifying the struggle. In the south-eastern corner, where the Italian detachment was fighting resolutely in defence of the Reims-Epernay road, after a withdrawal from Bligny hill, British reinforcements arrived on the evening of July 19.

The British force had been dispatched in haste to take part in the battle for Paris. When it arrived, Paris was secure and the German north-western flank driven in. The French commander at once launched the Scots and English on the north-eastern flank of the enemy, just below Reims. Passing through

the gallant, weary Italians, who had destroyed an entire German division and severely handled several others, the British made a menacing thrust towards the Reims-Dormans road. On a front of some seven miles they struck along the Ardre river valley at Marfaux, won it, lost it, then partly regained it, and captured Courton Wood. Strong German forces from the Champagne army, striking from the Bligny plateau, checked the British left, but the British centre and right fought onward. Against an enemy entrenched with an extraordinary quantity of machine guns on dominating high ground the Highlanders and Yorkshiremen fiercely and skilfully worked, winning St. Euphraise village and Bouilly across the Reims road, and approaching the main German route of communications running from Fismes and the Ardre valley to Dormans and the Marne front.

On the night of July 19, as soon as the British pressure was felt in the Ardre valley, the Germans, for the second time in the war, began a rapid retreat across the Marne. Both these retreats were directly induced by the unexpected pressure of the British forces. Böhn and Eben were acting by the Ourcq as Kluck had acted against Maunoury and Franchet d'Espérey, answering the sudden French flank by a terrific counter-attack, while maintaining the struggle on their front.

The German staff had miscalculated the British reserve strength in men, just as the same staff, under Moltke, had miscalculated the personal endurance of the British soldier. When it was evident that Sir Douglas Haig was strong enough to dispatch some of his best fighting men from local reserve to the Reims line, the enemy commander-in-chief at once ceased his desperate attempts to storm the Mountain of Reims and to maintain his initiative in attack by a flanking assault against the French 4th army in Champagne. The unexpected British movement completely brought to an end the vast scheme of operations which the enemy had begun in March. By an historic coincidence the Scottish Highland Territorial division, which had met and checked the enemy's first grand attack on March 21, helped to deliver the stroke which on July 19 changed the complexion of the war by throwing the Germans entirely upon the defensive.

Ludendorff, however, retained a certain superiority in effectives, though much less than that with which he had endeavoured to achieve a decision. His troops were strong in numbers if declining in spirit ; and he did not at the time think

that he had lost the initiative; and his organs of opinion in the German press proclaimed that his armies were merely retiring on a shorter line in order to be able to strike another smashing blow upon the Allied front.

It was not until September that the representative of the German ministry of war candidly explained, in main committee of the Reichstag, that the offensive operations on both sides of Reims had failed through the foresight of Foch, Pétain and their lieutenants. The statement ran:

> From the situation as a whole we were entitled to calculate that our offensive operations on both sides of Reims would lead to success. The decisive factor was to have been surprise, and our preparations were made accordingly. The surprise did not succeed. Our intentions were known to the enemy. He was able to devise his counter-measures, and he devised them well.

It was absurd, however, of the Germans to suggest that they lost this decisive battle through information given by some of their soldiers captured in a raid on July 14. It was not from such sources of knowledge that the mighty instrument of counter-offensive was mounted in readiness. General Gouraud had prepared since March for an assault on his army. The movement of the first French mass of manœuvre, from the Méry plateau in June to Villers-Cotterets forest early in July, was largely due to the initiative displayed by General Fayolle. Then, on July 12, three days before the final German operations began, the French army commanders round the Marne pocket, with their immediate director, General Mestre, and General Fayolle as adviser, elaborated the details of the plan of action which was followed. The plan was immediately sent to General Foch for his consideration, and quickly returned approved by his assistant, General Weygand. The attempted German surprise was therefore no surprise at all. It was foreseen, overreached, and transformed into an opportunity for a counter-offensive some days before the battle began.

The only unexpected element that entered into the situation was the new German army under General von Eben. This was obtained largely from reserves on the British front, where General von der Marwitz drew back from Albert to get a stronger line and save men; while General von Hutier withdrew under pressure from some of the low land by Amiens to protect himself by watery ground from another tank surprise.

At the time, the Germans expected the opening of a Franco-British offensive around Amiens and Albert, and the troops of General Rawlinson and General Debeney strongly demonstrated by a series of front line attacks. These had the effect of holding the forces of Marwitz and Hutier, while the answer to the creation of Eben's army was made by sending more British forces southward towards the Aisne. When the retreat of Böhn's divisions across the river of many victories was discerned on July 20, the French army commanders and their chiefs, Mestre, Fayolle, Pétain and Foch, all acting together, made a new plan.

It may be admitted that, regarded from one point of view, it was a plan that failed. Yet from the Allies' general stand-point it created a chain of successes of extraordinary magnitude. The plan was to envelop Böhn's armies, during the confusion of their retreat, by pressing the British counter-attack up the Ardre valley and resuming the French advance under General Mangin between the Aisne and the Ourcq. In incessant fighting, the French and British forces, by the bases of the German salient, tried to reach the communications of some 400,000 Germans, while the French and American forces on the southern line, below the Oucq and below the Marne, pressed upon the German receding rear in continual woodland actions against machine gunners and other rearguarding forces.

The affair was rather a test of German nerve than a scientific attempt at envelopment. The Franco-British-American forces were not only inferior in number but also in position. Their strategic direction was magnificent and it alarmed the German leaders, but the tactical opportunities were not great. General von Böhn was the German expert in the art of retreating, and he had lost none of his coolness and skill. His flanks were threatened chiefly from the Bligny plateau by the Ardre, already famous in the annals of the Cheshire Regiment, and from the Hartennes upland and the Grand Rozoy ridge between Soissons and Oulchy. Böhn met these threats when he turned his front into his rear by sending the divisions he retired from the Marne towards Bligny and Hartennes. He turned his withdrawing front into a source of strong reinforcement for his menaced flanks.

The result was that, although the Scots and English in the Ardre valley continued to thrust forward at the top of their skill, endurance and general fighting power, winning high admiration from their French comrades, they could not make any decisive

Mechanical Warfare Service, Dept.

THE VICTORY TANK. In 1918 the Mark IV tank was replaced by a Mark V model, a faster and more handy machine, which led the British assault on August 8, 1918, and so decisively defeated the German forces that General Ludendorff christened this day "the black day of the German army."

War Office

WHIPPET TANKS IN ACTION. Besides the heavy tanks in 1918 a medium-sized machine known as the medium A, or whippet, tank was introduced as a "cavalry" or pursuit weapon. It could move at from eight to ten miles an hour and its crew consisted of three men. In the above photograph three of these machines are seen advancing to attack during one of the great battles of August, 1918.

gain of ground against the stream of German divisions which moved backward to meet them. With the gallant French Colonial force on their right that drove into Vrigny, they fought through Reims Wood towards the German line of communications by Ville-en-Tardenois. But the Germans held until their troops in the south arrived roughly in line with them.

This action, however, helped to expose Böhn's other flank to successful attack by drawing north-eastward large masses of the retreating enemy. The fighting had been hard around Oulchy-le-Château by the Ourcq heights, where the wings of the armies of Generals Mangin and Degoutte had been checked even in the surprise offensive of July 18. On the Hartennes plateau the German forces had the cover of a wooded height with a deadly field of fire in every direction. South of Hartennes the landscape changed in character, being crossed by the great ridge of the Grand Rozoy, running from west to east at a height of some 650 feet, and in clear weather dominating the whole region between the Aisne and the Ourcq. From these heights the Germans had long slopes of open country running down to the French lines, and behind them were the solid positions of the Tardenois hills.

It was the design of General von Böhn to hold the western tableland and ridge, together with the Tardenois hills, in order to safeguard Soissons and the new German battle positions on the heights around Fismes. There was an enormous accumulation of shell and other material in the Tardenois, and the German commander required some weeks of reorganization work to get his new line into order. His railway over the Aisne at Missy was under the fire of long-ranged French guns and subjected to constant aerial attack, which made it difficult to move backward the great material of war collected for an advance on Paris. The German forces in Champagne again helped in holding the Ardre valley against the British and French thrusts, but the task of defending the upland flank of the central Tardenois hill positions became increasingly difficult.

As the Germans retreated over the Marne the Franco-American forces closed round Château-Thierry, entering the town on July 21, and advancing towards Fère and Oulchy by a southern flanking movement through La Croix, Rocourt and Epieds on July 22 and 23. North of the Ourcq the outskirts of Oulchy were reached, and the Soissons road crossed in a swaying battle of thrust and counter-thrust. The Germans held strongly to the

heights above Oulchy, but the French and Americans widened their ground below the village, after losing Epieds and recovering it. They broke through the enemy's rearguards on July 24, and swept ahead for two miles, taking Oulchy the next day, and working deeply into the forest of Fère and Riz Wood below it. At the same time the Villemontoire positions, seven miles north of Oulchy, were carried in a week's fighting, by Mangin's army.

There then remained only the seven-mile block of high land formed by the Hartennes upland, the Grand Rozoy ridge, and the Beugneux height between Mangin's army and the German centre. This clump of commanding ramparts had, however, become a more formidable obstacle than it had been on the first day of the Franco-American offensive. After a week of continual battle between the army of General Mangin and the armies of Böhn and Eben, the Germans tested and strengthened their high positions, and sited behind and upon the ridge and connecting heights the artillery withdrawn from the Château-Thierry sector of the Marne "pocket." There was indeed a treble reinforcement of the Hartennes-Grand Rozoy positions. Böhn's original holding forces were first increased by the arrival of Eben's army, and then enormously augmented by the foot and guns retiring from the southern battle.

This was the reason why Böhn considered that he had definitely stopped the Franco-American advance on his flank. On July 27 he drew in all his front from the north bank of the Marne, by Dormans and Chatillon, and stood to action on the Grand Rozoy ridge, the Fère hills, and the wooded heights south-west of Reims. Then it was that another British force was interposed on the critical Soissons flank with magnificent results.

The 15th Scottish division was attached to General Mangin's army and placed on the left of the 17th French division north of Oulchy. The Scots entered the struggle on July 28 and acted as flank guard while the fine French force carried the Butte de Chalmont, a high, coverless hill immediately above Oulchy. On July 29 it was the turn of the Highlanders and Lowlanders to make the principal assault, with the French division guarding their flank. The Scots had crossed the Soissons road from the hollow of Le Plessier-Huleu, and in front of them was the ridge of Grand Rozoy. Above them the Germans were waiting, as on a balcony, with machine guns bearing on the inclines, and gunnery observation officers watching for signs of movement.

The British soldiers, under heavy bombardment, fought through the woods beyond the Soissons road, and stormed the flaming ruins of Grand Rozoy village. The 17th French division came into action on the right of the ridge, and carried a farm, but could not reach the crest by Beugneux. The Germans held the high line in strength, and were resolved to make it a stronghold.

In the afternoon, however, the Scots opened another storming attack which filled their comrades with admiration. Over open ground, gradually rising to the German ridge positions, they went forward, with the German guns playing on the village in their rear and thundering in black smoke on their path, while cross-fires of defending machine gun barrages were directed down upon them. Yet they worked upward to the shelter of some woods, and extended to the high ground above. Clinging to this position in the evening, while the French troops supported them, and tanks and artillery came up the ridge, they advanced again on August 1, driving for two miles through the enemy's strongest positions above Fère-en-Tardenois. A monument erected by the 17th French division to the 15th Scottish division now stands on the historic height.

In direct consequence of the Scottish victory, General von Böhn abandoned all the Soissons-Grand Rozoy line and the country behind it. French chasseurs entered Soissons, and other Allied forces crossed the Crise stream, while the Franco-American centre advanced through the Fère hills. The fortified heights of the upper Ardre valley were occupied, and Thillois, by the outskirts of Reims, was recovered. The Allied movement was continued along the Aisne to Venizel, where the plums had been dangling ripe when the 2nd British division passed through in September, 1914. There were no orchards left in Venizel in August, 1918, but the fruits of victory were gathered there, after men in millions had been fighting against each other for four age-long years.

Fismes was carried by storm by the impetuous troops of the United States, who took 8,400 prisoners and 133 guns in the course of the operations. But the usual proportion between the men taken from an enemy and his general losses did not obtain. The French army in Champagne had taken few prisoners, yet had inflicted crippling injury upon two German army groups. Again, in the long, close struggle by the Mountain of Reims, many hostile divisions had been reduced to skeleton forces by

General Berthelot's army, that yet took only 2,000 prisoners. Ludendorff's aggressive strength was exhausted. The renewed striking power won by three years' operations in the east had been spent in the west in four months. Even the picked German forces were so weakened that their commander could no longer rely upon them to endure in attack.

Hindenburg had again to be brought forward as captain for a defensive war. The Hindenburg systems, with their half-forgotten Wagnerian names, were advertised in the German papers in more detail than in the spring of 1917, with a view to staying the decay of the spirit of the German people. Ludendorff did not go the way of Helmuth von Moltke and Erich von Falkenhayn, because there was no brilliant successor available; and his disgrace would, as a patent confession of defeat, have further tended to the demoralization of the Germans and to the immediate loosening of some at least of the middle Europe alliances. The armies were directed by men of his choice, and the governing class of the country, whom he represented, remained content with his ability.

By returning to the defensive system of 1917, which Hindenburg favoured, Ludendorff still confidently hoped to wear the Grand Alliance down to acceptance of a peace by negotiation, by which Germany could obtain large direct and indirect gains in the east more than compensating her for any adjustments in the west. Great efforts in corn-growing, oil production and mining were being made in the border states of Russia and the gradual Germanic reorganization of Russia was an important part of the enemy's new scheme. The visionaries dreamed of a menace to India by way of the Transcaspian railway, and a submarine base for Atlantic operations established northward in a Teutonic kingdom of Finland.

While elaborating, in early Napoleonic fashion, the romantic design of recovering from adventures in the east the power lost in the west, Ludendorff was startled into an appreciation of his immediate peril in the main theatre of war by a new offensive launched by General Foch from Amiens during an artillery duel along the Vesle river. The Allied commander-in-chief gave his opponent little time for day-dreaming and less for thinking.

Before General von Böhn could with any confidence report that the divisions released by the shortening of his line along the Aisne and Vesle would not be at once required in another

great battle between Soissons and Reims, two other principal German armies were reeling in disorder along the Somme.

The battle came to a close on August 4, with the retreat of the Germans from the country south of the Vesle, abandoning vast stores which they had not been able to remove or destroy. Mangin, in an address to his troops, enumerated the magnificent results which they had achieved. They had captured 20,000 prisoners, 527 of them officers, with 518 guns, 500 trench mortars, 3,300 machine guns, and many parks and depots, in addition to the plunder which the Germans had taken from the country, and were preparing to move. On August 6 Clemenceau, in a letter announcing to Foch his promotion to the rank of marshal, summed up the results which the armies under his direction had obtained in this series of battles:

> Paris disengaged; Soissons and Château-Thierry recovered in pitched battle, more than 200 villages delivered, 35,000 prisoners, 700 guns taken, the hope loudly proclaimed by the enemy before his attack shattered, the glorious armies of the Allies carried forward in a single victorious bound from the banks of the Marne to the Aisne—such are the fruits of a manœuvre as admirably conceived by the high command as superbly executed by incomparable leaders.

Mangin pointed out many errors in Ludendorff's account of the operations, and particularly noted his contemptuous reference to the American troops, who fought admirably and inflicted on the Germans very heavy losses.

The effect of this fighting in exhausting the German reserves was grave. On July 15 their strength had reached high-water mark, as they had then 207 divisions on the western front, of which 81 were in reserve. The initiative passed to the Allies, and was retained by Foch, while the recovery of the main line railway from Paris to Reims increased his manœuvring power.

Although after this battle Ludendorff professed that he still hoped to crush the Allies, the German government no longer shared his illusions and the countries allied with Germany lost hope. Long before the close of the fighting, Foch, on July 24, had issued instructions for great offensives to open on other sections of the German front, confident that the moral superiority of the Germans had passed away.

CHAPTER 12

The Allies Take the Offensive

After the retreat from the Marne of his armies of attack at the beginning of August, 1918, the German chief of staff expected to be assailed in turn. Hindenburg had resumed this position, and his quartermaster general, Ludendorff, had less overruling power than before. There was, however, no apprehension of disaster on the part of the restored chief of staff. Hindenburg rather welcomed than feared an Allied grand offensive. Throughout it had been his policy to stand on the defensive in the west, where, as he consistently held after Falkenhayn's and Haeseler's failure at Verdun, an attacker could be made to suffer the heavier casualties. He regarded his position as somewhat similar to that of Helmuth von Moltke after the first retirement in September, 1914. Like his predecessor, he proposed to stand for a while on the defensive and use his artillery in reducing the strategic French reserve.

Above all, the definite loss of the initiative was something which he did not admit. Moltke had recovered the power of attack at Ypres and along the Yser in October, 1914, a month after he had been beaten back from the Marne. Hindenburg hoped to be able to renew the struggle for the Channel ports, if these were required in the course of the new submarine campaign, for which larger and more powerful craft were almost ready. But he was not inclined to engage even in a local offensive before he had won a great defensive victory. Ludendorff had arranged an attack upon the British 2nd and 5th armies between Ypres and La Bassée. The movement was to have opened on July 23, by which time the German leader expected that his operations in the Marne and Champagne sectors would have absorbed all the reserves of the Allies. Sir Douglas Haig had answered this threat by leaving his front weak and sending some of his best divisions to counter the Germans' preliminary and secondary operations by Reims and Soissons.

Consequently, the German generalissimo still maintained against the northern British armies and the right wing of the

Belgian army a great concentration of force. The corps which he had sent from the Lys river front to the help of General von Böhn, General von Mudra, and General von Einem were balanced, in proportion, by the divisions which Sir Douglas Haig had sent to aid General Berthelot and General Mangin. Therefore, no attack was expected from the British forces.

At first, Marshal Foch no more anticipated a successful new British offensive than did Hindenburg and Ludendorff. Friend and foe knew that Sir Douglas Haig had not the strength proper for a grand assault. After helping the French armies the British forces were so reduced that, by the spring of 1918, they were only about one-fourth as numerous as the German forces in the west. In March, 1918, Sir Douglas Haig had 54 divisions, each reduced to 10 battalions, while the German commander had some 208 divisions, also reduced. Instead of the British armies being superior in power at the end of three years from the opening of hostilities, as Lord Kitchener had originally hoped, they were in the critical field of the struggle in marked inferiority as regards both foot and guns at the end of four years.

Allowing for sickness, there were only 500,000 British infantrymen to withstand the attacks of nearly 1,500,000 German infantrymen in March and April, 1918. The result was that the strength of the British 5th, 3rd, 2nd and 4th armies was seriously impaired. Only the 1st army on Vimy ridge remained fairly intact. The other four organizations of battle became mixtures of veterans and fresh soldier lads. The youngsters proved their power of resistance in the latter part of the struggle for the Channel ports, but their qualities had yet to be tested in the intricate and highly skilled work of a modern offensive.

The invisible pressure of overwhelming German forces, maintained against the British front from the end of April to the end of July, 1918, increased the technical difficulties of the British staff. Always the crippling of Foch's mass of manœuvre seems to have been, in the German intention, preliminary to the renewal of decisive attack on the British armies. This was designed to be completed by submarine operations, with improved U-boats acting in the English Channel from conquered French ports against both British and United States troopships.

In face of this continual and increasing danger to his line, Sir Douglas Haig and his army chiefs had a hard task to find time and opportunity for fully training their fresh troops and

re-formed divisions. Harder still was it to discover means for practising to perfection all that staff work in the direction of attacking movements of which the Germans were masters.

While completing his withdrawal from the Tardenois hills, between the Soissons plateau and the Ardre valley, Hindenburg rearranged his forces on the western front. By the Belgian coast and the flooded Yser, Admiral von Schröder remained in command of the German Marine corps, as part of the army group under von Armin, whose 4th army was still very strong round Ypres and Kemmel hill. Along the Lys river the German 6th army, under von Quast, was also in remarkable strength, but the new armies under General von Carlowitz and General von Eberhardt, which had been collected to make the break-through to Calais, were removed to the Aisne and Champagne front. General von Below's army, much lessened in force, extended below the Vimy ridge to Arras. From the Ancre to the Avre, General von der Marwitz, with his divisions also reduced in strength, guarded both banks of the Somme. Immediately below him was the army of von Hutier, likewise weakened by heavy losses and by the drawing off of forces for action along the Aisne.

Hutier was being rapidly and greatly reinforced, General von Böhn bringing men and guns towards Noyon, Lassigny, and Montdidier as fast as he could draw them over the Aisne plateau. Hutier, as brother-in-law to Ludendorff, had lost his importance in the decline of his kinsman's authority. Böhn was regarded as the better man, and in recognition of his success in escaping envelopment in the Marne operations was appointed army group commander between Prince Rupprecht's and the crown prince's armies. The reduction in the nominal power of the Hohenzollern prince was one of the signs of Hindenburg's return to authority. The new armies of General von Carlowitz and General von Eberhardt, two former corps commanders who had achieved most success in the operations against the British forces in the spring, were used in strengthening the wasted armies of General von Mudra and General von Einem from the Oise river to the Argonne forest.

The concentration of defensive power against General Gouraud and the French 4th army was eloquent testimony of the abiding effect on the Germans of the first great victory which Foch's lieutenants had achieved. Round Verdun, in a condition of considerable anxiety, was General von Fuchs, whose forces were

removed from the control of the crown prince and placed in the army group command of General von Gallwitz, an eastern commander who had fought in the first battle of the Somme, where Böhn had risen to high rank. Below Gallwitz's sphere of influence was a group of strong armies defending the Vosges line and the Alsatian valleys, under nominal command of Duke Albrecht, the heir to the Württemberg throne. On the Allies' side of the parallel battle, King Albert of Belgium acted as army group commander from Nieuport to the river Lys. Under him and his military adviser was the Belgian army, commanded by General Gillrain, together with the British 2nd army, directed by Sir Herbert Plumer, and the French mass of manœuvre which, under General Degoutte, had fought between the Ourcq and the Marne in July, 1918. Most of the United States divisions, which had formed a notable part of Degoutte's new army, were detached, and did not come under the direction of King Albert.

On the right of General Plumer's men there appeared the British 5th army, commanded by Sir William Birdwood, promoted from a corps command in the 4th army. The task of the British 5th army was to watch the Lille ridges and the movements of Quast's diminishing forces. Something was designed to happen when Quast's special divisions of assault were urgently required elsewhere. Below the 5th army, Sir Henry Horne with his 1st army stood on and around Vimy ridge. Sir Julian Byng, who had won his high command on Vimy heights under General Horne, remained with the 3rd army between Arras and the Ancre, on the line where he had stayed the Germans at the end of the previous March. Connecting, by Albert, with General Byng's troops were the Australian divisions which Sir William Birdwood had trained and directed from the days of Egyptian route marches, through Anzac battles on Gallipoli, to Pozières, to the Hindenburg line actions, and the tragic struggle for Passchendaele ridge.

The scheme which Sir Henry Rawlinson elaborated with Sir Douglas Haig had to undergo considerable criticism because of the presumed weariness of the old elements of the British forces and the inexperience of the new elements. It was, however, accepted. Measures were adopted to use the attack as a strong demonstration if it did not succeed as well as its authors expected, but steps were also taken to exploit fully any great advantage won. For this purpose the French line was altered

in character. General Debeney, commanding the French 1st army between Morisel and Montdidier, was removed temporarily from the direction of General Pétain and placed under British control. He became for the time an army commander under Sir Douglas Haig. General Humbert, with the French 3rd army below Lassigny and Noyon, was also partly connected with the British high command.

General Humbert had elaborated a great attack by his army, and had secretly made immense preparations. He began to be more open in his final dispositions, and thereby hastened General von Böhn's movement of reinforcement of Hutier's army. At the same time, under the influence of the British scheme, General Mangin, with the French 9th army, wheeled back from the scene of his victories below Soissons and concentrated openly against the Oise river and Chemin des Dames line on Böhn's flank.

Along the Aisne and Vesle the successful French 5th army continued to demonstrate vigorously while considerably changing in composition. The American and British units were withdrawn, and General Berthelot, a great expert in army organization, was detached for special work and replaced by General Guillaumat, a highly successful commander of the army of Verdun, who was recalled from his new command at Salonica, where he had prepared a decisive manœuvre which his successor afterwards executed. Marshal Foch's recall of General Guillaumat was highly significant. Like the return of General Mestre from the Italian front, and the restoration of General Mangin to army command, it showed that the Marshal of France wanted the most skilled of thrusting generals, with the latest experience of the developments of warfare, at the head of his forces.

With the exception of Sir Edmund Allenby in Palestine and Nivelle and Sir Hubert Gough in retirement, all the Allied leaders in the new tactics of hurricane offensive were banded against the waiting foe. General Gouraud was particularly menacing along the Champagne front. With adroitness and economy of life he kept three German armies stretched to parry his blow, but while brandishing his victorious power, delayed to strike. By Verdun, General Pershing built up the American 1st army from divisions released by General Mangin, General Degoutte, and General Berthelot. Screened by the French 2nd army, preparing to withdraw, the American commander, with his able lieutenant, Major General Hunter-Liggett, who had led the United States troops

in the Marne action, arranged a series of surprises for the Gallwitz group of German armies. Along the Vosges, General de Castelnau played a telling part as organizer of a flank thrust through Alsace.

The essence of the British scheme was, of course, surprise. This was greatly facilitated by the Germans' view of the weakness of the forces of attack. Hindenburg and his staff, to which Ludendorff was for months still attached, reckoned that the French 3rd army, under General Humbert, would open the offensive movement, with the French 1st army and the 9th assisting. This was the sound, easy method of retaining and extending the advantages won in Champagne and the Tardenois. From the British 4th army, demonstrating gun fire was expected, and General von der Marwitz's corps on the Somme were warned to prepare good cover. General Rawlinson's main problem in the new Somme battle was, therefore, the same as it had been in the summer of 1916. He had to concentrate in great local strength, without disturbing the Germans. The most elaborate methods of camouflage were used to disguise the massing.

General Rawlinson strengthened the 4th army by borrowing part of General Horne's 1st army. The Canadian corps was moved from Arras to Amiens and placed alongside the Australians. Success depended first on the secrecy and speed with which the Canadians were moved, and then on the staff arrangements for manœuvring into action the infantry, cavalry, tanks, and armoured cars of the transported forces, and for making the artillery work of the new gunners proof against errors. The march of the Canadians was conducted with perfect skill. The men and their trains hid by day and moved by night to an unknown destination, which neither the Germans' aerial scouts nor their espionage agents could trace. They arrived in darkness, south-east of Amiens, at the end of the first week in August, at the position prepared for them by Gentilles Wood.

This movement did not give all the strength required for breaking the German front. The Australians also concentrated for attack. For months they had been holding all the direct approaches to Amiens, both north and south of the Somme, by Morlancourt and Villers-Bretonneux. It was only natural that they should be relieved, and London, Sussex, and other troops took over their northern sector, on the tongue of high ground between the Ancre and the Somme, where an important position

had been won at the end of July, for the intended offensive along the Corbie-Bray road. Instead of going into billets, the northern Australian force crossed the Somme and increased the depth of strength of the Australians round Villers-Bretonneux.

There was, however, one set-back to the smooth working of the secret organization for one of the most important battles of the war. General von der Marwitz could not allow the high ground, snatched from him between the Ancre and Somme, to remain in British possession. He brought forward one of the best German shock divisions, the 27th, to recover the ground between the rivers, before the newly arrived English troops became familiar with their position. In a fierce local action at dawn, on August 6, 1918, the German commander regained the high ground and took some prisoners. The following day the Englishmen counter-attacked, and won back most of the upland. Their position, however, was not so good as it had been.

General von der Marwitz knew that his general staff expected a great attack between Montdidier and Soissons. He thought it likely that the Australians had been relieved by the English, so that a local action between Albert and the Somme might be started during the British artillery demonstrations in order to wrest all the riverside upland from his men and thereby increase the distracting effect of the British feint. To guard against this eventuality the German commander increased his forces of men and guns between the Ancre and the Somme, and opened abrupt, strong bursts of fire at night. To these the British gunners could not reply in any strength without alarming the Germans. The bombarded English infantry had, therefore, to endure the attacks. Against the imminent Australian-Canadian main offensive General von der Marwitz and his local corps commanders took no counter-measures whatever. This was apparently due to their confident belief that they would be able to resume open, field warfare against the weakened British army as soon as Böhn and Hutier had broken the French attack.

From the end of March to the beginning of August the German commander and his staff had not troubled to see that proper works were constructed. Contempt for the British forces was one of the mother causes of all the long series of German disasters that followed. The feeling of contempt did not last long, but it was fatal to the Germans. The attackers were admirably favoured by the weather. There were four days of rain which

completely screened the final preparations for the offensive, and when it was about to be launched, the rain ceased, allowing the ground to dry. Then, on the morning of the assault—August 8, 1918—a remarkably thick summer fog blanketed the battlefield.

British military authorities were at last paying very special attention to the science of weather forecasting as a decisive branch of staff-work, and were fully repaid when they were able to surprise the Germans in a dense fog between the waters of the Somme and the Luce. Less than half the British guns were registered, having hurriedly been concentrated from other parts of the front. No enemy targets were visible, but though the guns fired only for four minutes, they produced complete destruction on the southern side of the river. For a length of 20 miles the artillery thundered in fog so thick that the flame of the charge could not be seen 30 yards away. The main attack, at 4.20 a.m., was a complete surprise. Along the river the Australian divisions under Sir John Monash went forward with tanks, and found in many places the garrison of the hostile line dead or fled. Some battalions advanced half a mile before encountering any resistance. Then, in the mist, the infantry and fast tanks began working into machine gun positions. The field guns were then moved forward.

After three hours of fighting, the fog gradually thinned as the attacking forces reached the Germans' heavy gun positions. In the clearing sky British aeroplanes piloted the tanks to German positions, and then covered them with a defensive barrage against German field guns by dropping smoke bombs. Other pilots discovered fresh German troop movements and led the forces of attack in their ambushing operations.

At 8 a.m. a German brigade, just relieved, was overtaken. It surrendered, as did also many German units resting in reserve areas. By noon the Australians had driven nine miles into the hostile lines, and one of their battalions at the farthest point of the advance had only three casualties! The Commonwealth troops were checked only by the riverside promontory of Chipilly, where the Germans fired across the valley. At midday the infantry opened their line, and British cavalry and armoured motor-cars, piloted by aeroplanes, passed through to exploit the victory. They caught up with a train bearing off a railway gun. Farther on they captured a train arriving with reinforcements; yet another train was wrecked by aeroplane bombardment. By

a gully, the armoured cars found more strong forces, but, leaving them for the cavalry to collect, sped into Framerville, chased a German corps commander, who escaped in his shirt after losing his staff officers, and surprised more German forces lunching in a village. At the end of the battle two cars, finding no formed body of Germans before them, went down the road to Péronne. There they were stopped. One had a wheel shot off by a solitary field gun, the other was disabled on the road. The crews then captured a final batch of Germans, who dragged the machines to the new British line. This ran in front of a detached ridge near the town of Lihons, about 12 miles from the Australian positions at Villers-Bretonneux.

By Lihons the old French lines made in the early Somme actions from 1914 to 1916 enabled fresh German forces, brought forward with extreme speed from the vicinity of Arras, to prevent the attackers from clearing the entire Santerre tableland in the great bend of the Somme. The roads to Péronne were thronged with men and transport in retreat. Over the fugitives flew British aeroplanes, pouring down machine gun fire and turning confusion into chaos. It would have been possible to drive still deeper into the Germans' territory, but Sir Henry Rawlinson was well content with his decisive gains, and, by reason of the issues depending on them, preferred to make sure of keeping what he had won.

At the close of the day the Australian line ran from the neighbourhood of Cérisy towards Proyart, Rainecourt, and Lihons ridge, close to Chaulnes. The men could clearly see the old familiar line of trees topping the Péronne road. Their losses in this advance were little more than those of an ordinary day in many parts of the line. The Germans had not used their machine guns with their usual determination, and nearly all their artillery on the main front of the advance were taken. The victors were in tremendous spirits. As a movement in trench warfare their feat was unparalleled.

By the windings of the Luce stream the ground rose steeply with hanging woods, and owing to the contortions of the ground the Canadians had to cross the water south-eastwards, swing northward again along the river flat, and once more turn southward so as to assail the forested height of Dodo Wood unexpectedly and directly from the north. Moving in the figure of an S, along ground which German gunners dominated, and

bringing with them tanks which had stealthily been worked over the Germans' river moat in darkness, the Dominion troops, under General Currie, executed this snake-like advance in blinding fog with the utmost success.

The Australians made the longest thrust in modern trench warfare, while the Canadians carried out the most complicated and decisive of tactical approaches. On the immediate passage of the Luce depended on one side the length and value of the Australian drive, and on the other side the entrance into action of the French 1st, 3rd and 10th armies. Canada unlocked the gate through which the Germans were driven out of France.

After forcing the passage of the Luce the Canadians met with fierce resistance in the woods above Hangard, where the Canadian Highlanders attacked the enemy with the bayonet. But they swung into line with the Australians on schedule time, and, helped by their more forward comrades, let through the cavalry and armoured cars by Weincourt. The Canadians had their cavalry behind them. Some of their troopers had already distinguished themselves on the Santerre upland, as had also the pioneer Canadian armoured car detachment. When the infantry opened, the horsemen and tanks worked speedily along the roads and over the cornfields towards Rosières. When the cavalrymen were checked by machine guns in a wood south-east of Marcelcave, the whippet tanks crashed into the trees and over the Germans.

In overcoming the numerous small defensive positions in the undulating country, which positions were the Germans' principal rallying-points, the new armoured cars saved the lives of thousands of men. Crews and vehicles suffered from gun fire, for on the last ridges below Rosières were gallant German artillerymen inspired by the officer who, singlehanded, fought General Byng's tanks from Flesquières hill. The Canadian cavalry also came under heavy fire by the approaches to Roye. By the evening of August 8, however, their advance reached a depth of eight miles.

During the Canadian operations in the Luce valley the French 1st army did not move. Its guns merely bombarded the hostile lines for 40 minutes after the British infantry attack had started. It was much too costly for the French foot to attempt to advance before the German positions on the Avre were turned by General Currie's attack. On the right of the Canadians was the light

infantry division of General Brissaud-Desmaillet. As soon as the Canadians had achieved their objectives French troops gradually began battle around Morisel and Moreuil on a front of only two and a half miles. The underlying design was to refrain from greatly alarming von Hutier until the peril to his forces was increased by the rout of Marwitz's corps on his flank. Hutier was being taken in the rear, above Montdidier, and the less he was disturbed during the enveloping operations the more men and guns he would lose. Naturally, his corps commanders, by the breaking end of the line, were alert to the local danger, and the French had to fight as hard as the Canadians.

It was not until 8 a.m. that the storming division took the Avre bridge-head of Morisel. The infantry crossed the steep river valley, bringing their tanks with them. They encircled Moreuil, and then put on pace to keep in place on the great spear-head of Allied forces furiously thrusting towards the old Chaulnes-Roye line. Being more advanced than the French, the Canadians could on occasion swerve, and take in flank German forces resisting General Debeney's men.

In the meantime, as he felt the Germans resisting, General Fayolle, in consultation with Sir Douglas Haig and General Pétain, began to press the Germans by the southern side of the Amiens-Noyon salient. Along the Avre, where the French 1st army was maintaining a tremendous gun fire, infantry action developed on a wider front towards the neighbourhood of Montdidier. This intense pressure against Hutier's front facilitated the progress of the forces along his rear, and enabled the left wing of General Debeney's army to thrust to a depth of 6¼ miles behind Montdidier, with a marvellous economy of life. About 2,000 prisoners and 70 guns were taken.

The Canadians were nearly two miles in advance of the French, and the Australians a mile ahead of the Canadians. In the night of the first day of battle there was no doubt as to the fall of Montdidier. The only question was the number of troops and guns likely to be cut off before they could be retired. The French were in Mézières, the Canadians were by Le Quesnel, where "pockets" of Germans were holding out in the village, and the Australians were in front of Lihons ridge. The original German front on the Doms brook was broken at Hargicourt, and violently bent just above Montdidier. Across the new and very narrow salient the Allied gunners poured a continuous double barrage.

The only temporary check to the combined operations occurred by the upland north of the Somme, where Marwitz was strongly prepared for a local action. Here his gunners opened heavy fire in the night upon the assembled British troops, and answered the great attacking barrage with an impeding curtain fire. Most gallantly the troops endeavoured to carry out their part of the programme of the offensive and win the Chipilly spur by the riverside. One brigade carried Mallard Wood by desperate fighting, taking 500 prisoners and guns, while another brigade moved on Chipilly. In the dense fog of the river bottom some British tanks and infantry lost direction and turned north-westward. Others gallantly persisted on the right line, and by the evening fought their way into the village, but were not in sufficient strength to hold it.

In the evening of August 9, however, the British troops fought into Chipilly. Three tanks took Morlancourt and a fresh German battalion which was relieving the garrison. The men of Chicago, acting as reserve to Sir Henry Rawlinson's army, played a gallant part in this northern victory which released the British 3rd and 1st armies for action, and sped the Australians on the way to the Tortille river conquest. The United States troops were marching forward to help, but were likely to arrive too late for the opening of the action. They reached the line a few seconds after the hour of attack, and, without stopping, one battalion went straight into and through the German works, completing a long march by a victorious charge, followed by several hours of hard fighting and hard work in consolidating the conquered position.

In the meantime, men of the 1st army vigorously resumed pressure upon the new German forces south of the Somme. By a prolonged and fierce thrust a Victorian brigade worked up the Lihons ridge. Men and tanks went out into the open, under direct fire from German batteries, shot down some of the gunners, and by Friday night, August 9, reached the top of the isolated hill swelling some hundreds of feet above the tableland west of Lihons. During the night the Germans brought up more reinforcements from Cambrai, and at 8 a.m. on the following day (August 10) the tireless Victorians again opened the battle. Coming at once under heavy fire they opened out, and, with the Germans enfilading them from Rosières railway and sweeping them in front, won a mile of most difficult ground. As they

were then brought to a standstill, the Canadian infantry relieved them by a general attack on their right.

The men of the Dominion advanced over the open terrain, passing the Victorians' flank. Then other Australian troops attacked the Lihons ridge from the north, took the wooded summit, and entrenched on the eastern slope, after capturing the German field guns which had tried to break them. By the afternoon of August 10, the ridge was partly won. Darkness fell, with Australians and Germans still facing each other on the disputed ridge. At the same time the Australians took over part of the attack north of the Somme, and won the important position of Bray hill. South of the river an operation conducted by their tanks was discovered by German aeroplanes which attacked with bombs and helped to check the advance by Proyart.

By this time General von Böhn, hastily called eastward to save both Marwitz and Hutier, succeeded in temporarily staying the British advance. He got guns into position in front of Chaulnes and Roye to replace the lost batteries, and at Bouchoir, on the Roye road, the Canadians had a fierce struggle with a German division brought by motor-omnibus from the Soissons sector. Böhn's task was to save the corps in the Montdidier salient from encirclement. He prevented another complete disaster by beginning the Montdidier retreat in the evening of August 9, when Debeney's army was well behind the town at Hyencourt and Frêtoy ; but his loss in men and matériel, when Montdidier fell on August 10, was tremendous. What saved the German armies from absolute rout was the old Somme fortified line. There were extant German machine gun positions, which had been in British hands before March 21, 1918, which served them with great effect. Some of these, by the Amiens-Roye road, nearly midway between the two cities, were an obstacle to a determined cavalry charge.

On Saturday afternoon, August 10, General Currie made an attempt at another sudden break through the re-formed hostile front. A number of British aeroplanes opened action by bombing, machine-gunning and smoke-blinding the fresh German forces, while fighting both hostile formations of aircraft and directing the land forces of the attack. These consisted of dragoons, hussars, lancers and Canadian cavalry, with tanks cooperating. The tank commanders could defy machine guns which were death to the cavalry ; the cavalry could ride down

cannon which were often fatal to the tanks. The German machine gunners, in a quarried wood by the source of the Avre river, succeeded in checking this remarkable essay in new tactics, so far as it was an attempt to cut a way into Roye. But the cavalry, tanks and infantry continued to work forward towards Roye, with the French chasseurs on their right, the Australians advancing beyond Lihons towards Chaulnes on August 11 against the continual counter-attacks of outnumbering enemy forces.

On August 10 every fresh German division diverted to the broken Somme front cleared the way for another victory for the Allies; for General Humbert, with the French 3rd army, was then making in unexpected fashion the attack which the German staff had been for a fortnight and more expecting. He gave no warning of his opening of battle. By a programme of detailed staff work the French infantry advanced with a delayed, overwhelming barrage suddenly thrown before them when they were already in action.

Again it was a general's battle. The high, broken upland of the Thiescourt hills, famous in many struggles between September, 1914, and March, 1918, was the objective of the French commander. It blocked the road of his flanking direction of attack against the rear of the Roye-Chaulnes fortified lines. General Humbert demonstrated on his right directly against the Thiescourt heights, but flung his main force alongside the wing of the victorious 1st army. He broke into the Matz valley, down which Hutier had attacked him in June, carried Rollot and Conchy in a six-mile advance, in which 8,000 prisoners and 300 guns were taken. Then, with the armies of General Rawlinson and General Debeney, his divisions completed the concentric enveloping movement on Roye and the upper line of the Somme river, which was being already heavily bombarded by British, Australian and Canadian artillerymen.

From Gury, General Humbert's men worked round the Thiescourt tangle towards Plessis de Roye and the outskirts of Lassigny. By August 13 his patrols were within a mile and a half of this key position between Roye and Noyon. The French 1st army were then on the outskirts of Roye, at Armancourt and Tilloloy; while the British 4th army partly encircled the same city from the north and cut the Roye-Chaulnes railway by Chilly. The British won Proyart, Damary and Parvillers, The German prisoners numbered 38,500, with more than 800

guns. The British 4th army took 21,844, the French 1st army 8,500, and the French 3rd army more than 8,000 prisoners.

One result of this series of defeats was the sudden retreat, in the second week of August, of General von Lossberg's last divisions of assault from Merville and the Lys river line. The designed advance on Calais was abandoned, and the commander of the northern German army group cautiously put more water between his outposts and the rapidly advancing British tanks. His forces were being weakened by reinforcements for the Somme front, after having been diminished to save the Aisne and Champagne line. The power of the initiative was definitely possessed by the Allied commander-in-chief. Without giving the enemy time to recover from the last blow, Foch brought the French 9th army, under Mangin, again into action.

In one week, from August 8 to August 15, 1918, the British 4th army, the French 1st army, and the French 3rd army had destroyed the great German salient near Amiens and the Calais-Paris railway, and driven 30 German divisions back to the 1914 line between Albert and Lassigny. Along the new line of attack the British, French and United States forces rapidly organized the means of another pitched battle, and with their heavy artillery interrupted the Germans' communications across the river bend behind Nesle, while keeping the enemy's columns under continual aerial bombardment.

The imminence of this further attack could not be concealed from the Germans. Their scouting pilots at times reconnoitred the Amiens area almost as far as the sea, and discovered the French and British preparations. They also perceived that new French and British blows were coming from both flanks of the Somme line. Sir Julian Byng, with the British 3rd army, was about to strike towards Bapaume, while General Mangin, with the French 10th army, had been reinforced by some of General Gouraud's best divisions for a turning movement around Noyon. Marshal Foch was opening his second pair of pincers.

In these circumstances General von Böhn endeavoured to save his wing by employing the device of withdrawal on concealed battle positions, such as General Gouraud had used with effect on the Champagne front. The German 17th army, between Arras and the Ancre, fell back from Beaumont-Hamel towards the railway embankment and cutting at Achiet-le-Grand. At the same time, a new German army, under General

von Eberhardt, containing elements of the old German 7th army, which Böhn had originally directed on the Aisne, created a deep foreground position by the ravine of Audignicourt, between the Oise river and the Ailette stream. Success in these manœuvres for a great ambush of the attacking forces depended on secrecy. Secrecy, in turn, depended partly on superiority in the air, but largely upon the determination and skill of the scanty troops left in the firing line to check and delude the masses of assault. In these intended manœuvres the Germans were not successful. The New Zealanders, under General Byng, discovered the withdrawal of Below's forces before the movement was completed, and in skirmishes took the high ground by Puisieux which the German commander had intended to be held. The German battalion which had retired too hastily was ordered to recover Puisieux. This it failed to do.

On the southern Noyon flank, General Mangin began his operations in strength some days before Sir Julian Byng opened his offensive movement. The two Allied commanders acted in closest cooperation, for they had a common objective removed from all geographical considerations. They were set to attract and destroy the new defensive mass of manœuvre which Hindenburg was creating with utmost speed by the reduction of Ludendorff's armies of attack.

Every night, large German forces were poured into General von Böhn's group of armies to enable him to make a long stand between Arras and the heights above Soissons. Böhn had to stand to battle for the reason that his line covered a great accumulation of priceless material of war. The Germans had already lost in less than a month 1,700 guns by capture, and the number of batteries destroyed by the Allies' counter-battery firing between Ypres and Verdun made the enemy's total loss in artillery almost double that of the captured guns. Böhn had been set the task of withdrawing thousands of other imperilled guns back to the Hindenburg line and to the Alberich line above the Ailette river, together with an immense amount of ammunition, railway material, and general supplies. Although Hindenburg was very near to the supreme crisis in German man-power, his need for conserving the machinery of battle was more immediate than his need for saving effectives. It was necessary to initiate delaying actions on the 1914 line in order to carry out a fighting withdrawal to the line of 1917.

Marshal Foch, on the other hand, was only demonstrating for the time being against the new German front. His great aim was to reach the Germans' 1917 line immediately. First of all, General von Böhn was to be attacked on his flanks, so as to facilitate the task of driving in his centre. Of all the Allied army commanders in action, General Mangin was set the hardest task. He had to break directly into the Alberich line by Laon; turn, on his way, Noyon on the left and the northern Aisne plateau on his right; and then conquer the Germans' central fortress in France, consisting of the great hill forest of St. Gobain. This movement would save Marshal Foch the cost of storming the Aisne heights. The army under General Mangin was increased in strength and used with skill. At first the French commander appeared to be about to fall into the trap which the Germans had prepared for him. In the middle of August he opened a heavy bombardment on the German line between the Oise and the Aisne. In the morning of August 16 the French general increased his gun fire to its utmost power, and his opponent drew back his main forces and covered with his artillery all ways of approaching the battle positions.

But Mangin was not to be caught by an imitation of his comrade Gouraud's fighting. He had some of the best of Gouraud's men under him, in particular the division which had ambushed the Germans in the middle of July below the Moronvilliers heights. French patrols went out feeling for the enemy, and when the Germans withdrew they rushed their machine gun posts by Moulin-sous-Touvent and occupied some three miles of ground. The next day, the same division sent out more patrols and seized another important stretch of country, while the left wing of the 10th army cautiously moved forward into alinement with the successful skirmishers. General Mangin merely stole ground from the Germans without adventuring against the new fortified positions prepared against him; instead of entering the ambushes, he annexed them. For four days and nights his patrols worked forward, drawing the Germans' artillery fire at each success, but presenting them with no large or easy targets. There was scarcely any infantry fighting, and the French losses were remarkably light.

Without anything in the nature of a pitched battle, the Noyon flats were dominated by the capture of a hill south of Carlepont, and the Oise lowland was brought further under fire by a

trickling advance above Autreches. Aware that he had been outplayed, the German commander decided on a counter-attack before the offensive occurred. He was, however, too late.

By the early morning of August 20 General Mangin had his artillery sited in the captured German outpost lines. Twenty minutes before the German attack was due his barrages fell upon the assembled hostile troops, and his main infantry, accompanied by numerous tanks, moved up the high broken ground of the forested slopes between the Aisne and Oise rivers. In the centre, the formidable gully of Audignicourt was carried in the early morning. As soon as the gunners reached the heights they began to smash another path of advance. Above Soissons, Tartiers hill was stormed by nine o'clock, and a German force equipped with anti-tank rifles was captured, clearing the way for another movement towards the Ailette river, in the rear of the famous ridge of the Chemin des Dames.

In the meantime a successful movement was made by the division which General Gouraud had lent to General Mangin. These troops started from positions south of Belfontaine, which they had gradually won from the Germans. From the narrow salient which they occupied they spread fan-wise out into the wooded defiles of the fortified hill system of Mont Choisy and the Blerancourt downs. The ground was too broken for their artillery thoroughly to search, and the men had to fight forward with rifle, bayonet, bomb, and machine gun. Struggling through thickets flaming with hostile machine gun fire, the Frenchmen reached the high wood below Choisy. There they fiercely demonstrated against the citadel of the hostile system while executing a turning movement on the right. They turned the Blerancourt hill and linked with the force which had fought through the Audignicourt gully. This gave General Mangin the village of Cuts, and the centre of the enemy's important lateral communication—the highway connecting Noyon and Coucy.

Then the attack was pressed on Mount Choisy, the commanding hill position south-east of Noyon. Resolutely the German garrison fought, answering charge by counter-charge, and helped by flanking fire from forces in Carlepont Wood whom the attackers were driving into a narrow salient by the Oise. The Frenchmen were forced back, but returned; and in a series of separate actions around quarries and strong points took one German battery at the point of the bayonet and conquered all

the hill by 11 p.m. The next morning, General Mangin advanced his attacking forces in greater strength on his right, and battled over the Aisne heights to the Ailette valley near Coucy-le-Château. At the same time he advanced his centre to Bretigny, on the Oise, three miles from the town of Chauny. Noyon was outflanked and its eastern communications severed. General Mangin's army took a great number of prisoners and guns while pursuing the broken enemy across the Oise and the Ailette rivers. As Böhn's left wing fell back in confusion a single division of the French 3rd army, under General Humbert, stormed the Thiescourt hills, which had been outflanked in a previous action conducted in cooperation with the British 4th and French 1st armies. Lassigny was recovered on August 21, and Noyon half-encircled westward from the Divette stream, in the night, when the city was outflanked on the east.

At daybreak on August 21—as the German army group commander was sending strong fresh forces down to the heights above Soissons, in a vain endeavour to break into the great new salient which General Mangin was making—more instant work was provided for all the reserve divisions which General von Böhn could obtain. The British 3rd army, under Sir Julian Byng, attacked on a front of 10 miles, from the ruins of Moyenneville, south of Arras, to Beaucourt, north of the Ancre stream. A dense fog hung over the wilderness of the old Somme battlefield, upon which four great actions had already been fought. It was a tangle of rusted wire, zigzagging ditches, hidden pits, and broken works of all kinds from which the main forces of the German 17th army, under von Below, had withdrawn to a battle position running by the railway line at Achiet-le-Grand, three and a half miles from Bapaume.

The German commander was thoroughly alert, as was shown by his withdrawal to his battle positions. Yet, on a part of the front, his men were surprised by the British tactics. Sir Julian Byng did not employ the hurricane bombardment which Rawlinson and Humbert had used. His gunners steadily fired for two hours on the German positions, which were screened by a thick fog, for which, under the advice of its weather experts, the 3rd army had been waiting. The fog was deepened by innumerable smoke-shells and, just as dawn began to break over Gommécourt, the infantry attack opened. For a distance of about 10,000 yards English troops swung forward towards

Moyenneville, Courcelles, Ablainzeville, Logeast Wood, and the railway junction near Bapaume.

On the eastern sector New Zealand and Lancashire and Yorkshire troops waited for an hour until the northern attack had developed, so as to come into line of assault for their nearer objectives along the Ancre valley. The broken ground was the chief trouble, as it undulated in rises of 150 feet, over one of the most laboured of all fields of war, to the embankment and cutting of the Arras-Albert railway, which the Germans held as their battle-line. Preceded by tanks, the first divisions of attack worked in wide order over the German outpost line.

Some of the battalions of Guards broke rapidly through the main German line and entered Hamelincourt. Below Moyenneville there was fierce fighting at Courcelles, where the Berkshires distinguished themselves, and in Logeast Wood. Here German machine gun positions were outflanked and encircled, about 1,000 men and two battalion commanders being captured, together with Austrian field gunners brought from the Italian front to strengthen Below's line. Areas in which British gunners had shelled hostile batteries with gas were clouded when the assailing infantry and tank sections arrived, and, in the mist and smoke that hung about till noon, some units lost direction. By 6 p.m., however, the northern part of the railway embankment was occupied, and outposts were advanced more than a mile eastward in places.

Stronger opposition was encountered on the southern line of attack between Achiet-le-Grand and Beaucourt, on the Ancre. Here it was that the German army commander used his reserves with the utmost determination. He had to save the flank of the weakened forces by the Somme which General von Böhn was trying to withdraw with all guns and material. The chief resistance took place at an old German machine gun redoubt on the high down of Beauregard, midway between Puisieux and Miraumont. This was known as the "Dovecot," so called from a pigeon-house which stood there in the first Somme campaign, and the redoubt covered the railway as it swung south-west towards the Ancre. Late in the afternoon the Manchesters cleared the "Dovecot," only to be driven out by a fierce German counter-attack. Under a heavy barrage the Manchesters and their comrades fell back from crater to crater during night fighting. Then, before the Germans could get all their new machine guns

into position, the Englishmen returned in an attempt to recapture the "Dovecot." They had hardly established themselves when a fresh enemy division, released from the Lys front by the great withdrawal going on there, stormed the "Dovecot" just before dawn on August 22. The Manchesters attacked the fresh German division at 7 a.m., and for the third time carried the "Dovecot," and for another spell held it, while the battle which they had opened widened and became intensified.

The movement by the British 3rd army, under Sir Julian Byng, at a time when the British 4th army, under Sir Henry Rawlinson, the French 1st army, under General Debeney, the French 3rd army, under General Humbert, and the French 10th army, under General Mangin, were all in action, made a line of conflict of more than 90 miles between Soissons and Arras. Foch's general offensive was developing in weight and scope.

While General Pétain, with General Fayolle's group of three French armies, was strenuously engaging the fresh forces which Böhn gathered on his left wing, Sir Douglas Haig was using only two British armies, the 3rd and 4th, to exhaust the reserves being hurried down from the Lys to strengthen Böhn's centre and right wing. As soon as the 3rd army had broken across the Arras-Albert railway the British 4th army resumed its drive on either side of the Somme between Albert and Chaulnes. In the mist of early morning of August 22, Surrey, Kent, Essex, London and Australian troops worked across the Bray upland into Happy Valley and through Méaulte. By determined rushes some of them entered the ruins of Albert.

Above Albert the Germans answered by heavy counter-attacks against the new line of the 3rd army. At night, in the moonlight, the struggle continued, and under a bombardment between Arras and Chaulnes the two British armies continued to thrust into the German defences. Along the Ancre the English and Welsh troops sent patrols up the river valley, where the German garrison was still strongly holding out on the hills by Miraumont, with reserves hidden in the folds of ground counter-attacking against the "Dovecot," which again changed hands. While the New Zealanders, Lancashires and Yorkshires were pressing forward towards Bapaume, General von Below, in the evening of August 22, endeavoured to restore the situation by a counter-attack in force on the northern embankment of the Arras-Albert railway.

Sir Julian Byng, however, had more rapidly prepared another grand attack. His tanks and infantry stormed into the village of Gomiécourt, under raking field gun and anti-tank fire from batteries along the Arras-Bapaume road around Achiet-le-Grand. The assembled German infantry was swept by the British barrage, and so broken by the attackers that one of the fresh divisions brought up for the counter-attack was thrown into complete confusion, battalions and companies losing direction, so that sections came into action a mile apart. Before midnight Gomiécourt, a mile and a half above the German position of Achiet-le-Grand, was taken.

This British success was followed up, at dawn on August 23, by a general attack between the Cojeul river and the large plateau of Dead Man Down above Bapaume. The British Guards, with other divisions alongside them, struck at the northern part of the Arras-Bapaume road by Boiry-Becquerelle, Boyelles and Ervillers. In front of the highway by Hamelincourt was a fresh Saxon division, brought up to reinforce the Prussians and Bavarians, but this was unable to withstand the advancing British troops.

Above this important scene of action the tanks led the way into Boiry and Boyelles, and then advanced along both slopes of the Cojeul river valley, and across the hill rising above the Sensée river and St. Léger. Nearly all St. Léger Down was won, the attacking troops dropping into shell-holes half a mile from the village under machine gun fire and artillery fire from the Germans on Dead Man Down.

After the victory of the Arras-Bapaume road the tanks were directed to pursue the Germans, and were guided by low-flying British airmen. Some of the tanks broke through the upper Sensée valley defences, and then made their way up the side of Dead Man Down, reaching the road to Croisilles well in the rear of Ervillers. If it had been possible to sustain this thrust a break-through might have been immediately effected. By this time, however, the tanks had got into the Germans' main artillery positions and were exposed on the lower part of the bare hillside to a converging gun fire at very short range. Yet the success remained substantial, and with other victories all along the British line it decided the struggle with General von Böhn's armies, compelling him to speed up his preparations for a retreat from the Somme. The surprising thrust at St. Léger

and Dead Man Down was followed, at 11 a.m. on August 23, by the sudden breaking of the Germans' defensive flank at the fortified gully by Achiet-le-Grand and the Irles ridge.

The advancing British troops pressed along the Ayette-Bapaume road to Bihucourt village, two miles and a half from Bapaume, which was at once brought under short-ranged, observed gun fire from the arc of conquered downs northward and north-westward. Then the New Zealand division, which had been battling for three days by Puisieux, was also able to strike across the railway towards Loupart Wood and close upon Bapaume from the west. The enemy garrison of Miraumont was the only remaining obstacle to a general British advance between the Ancre and Cojeul streams. In order to carry Miraumont, some Lancashires at last swam the flooded stream by Grandcourt and made an advance along the high southern side of the water-course, by the old German trench system extending to Pys.

The Germans were then engaged on the Thiepval ridge, and the Lancashire troops stole forward in the rear unperceived. But their bold move was countered by a strong encircling movement as soon as the Germans were aroused. They were completely cut off, but received messages dropped from aeroplanes that relief was coming to them. They held out until this arrived, and then joined again in the main British offensive which by this time was sweeping over the Thiepval-Pozières ridge.

Miraumont did not fall until the morning of Saturday, August 24, after a siege of 78 hours. So long as the famous Somme ridge south of it was intact, the enemy reinforcements could be collected in the folds of ground eastward. In order to take the old main rampart of the Bapaume defences, a movement of cooperation was required along both banks of the Somme river. Happily, general conditions were different from those under which the first battle of the Somme had been started. The last battle of the Somme was opening with a succession of surprising flank offensives, which continually tested all enemy forces along a front increasing to 100 miles.

The design was to wear down the reserve strength of General von Böhn so as to leave a part of the German line just beyond his personal control weak and open to a decisive thrust. Sir Douglas Haig adopted a scheme devised by Sir Henry Horne, the leader of the British 1st army, and, by a secret manœuvre very similar to that employed in breaking the line of the German

2nd army near Amiens on August 8, the British commander-in-chief was on August 23 busily engaged in rounding off his first series of final victories. The Canadian divisions had been retired from the sector immediately north of Roye, after driving the Germans back for 15 miles and taking many prisoners and guns. Naturally, the German staff concluded that troops which had done so much intense day and night fighting required rest. But no British divisions of attack were resting after labour. They were devoted to a further advance towards the lines of the Hindenburg defence system in an effort of sustained fighting.

At the same time, the gunners of the French 1st army under General Debeney, which had taken the important position of Beauvraignes, midway between Roye and Lassigny, opened a heavy bombardment. British forces began their renewed operations in the morning mist of August 23, when the German line was breaking above Bapaume. On the southern side of the Somme, along the tableland of Santerre, the Australians stormed the ridge of Chuignes and the spurs commanding the river valley as far as Suzanne, where the British troops on their flank advanced in line above Lihons. In a wood beyond Chuignes the men of New South Wales found a gigantic gun which had been employed in bombarding Amiens. It was completely wrecked, the great barrel having been blown off the carriage and tumbled downhill into a gully. It was no doubt this disaster that had saved Amiens cathedral.

Having outflanked Bray across the river, and brought guns on to the Chuignes rise, the Australians in the night stormed Bray, and at daybreak pushed on to the high ground by Suzanne, taking prisoners. Then, against small hostile rear-guards, the Australians worked onward towards Péronne. As soon as the British line swung strongly towards what had been the old French front of attack in the Somme battle, the extreme right wing of the British 3rd army in Albert also moved, by Bécourt and Bécordel, towards the old British assembly trenches. But instead of striking out by Fricourt, where the first grand offensive had been cramped by narrow space, the advancing troops stormed at once over the end of the famous Somme ridge.

Thiepval Down and the valley of the Ancre, where the Ulster division had fought in July, 1916, leaving the position to be carried by costly siege operations lasting four months, was quickly taken on the morning of August 24. On the night of

August 23, Yorkshire, Welsh and Lancashire troops crossed the inundated Ancre brook and, without the help of tanks or following artillery, rushed the slopes of Thiepval. Then, after a short rest, they went on, in early morning of August 24, to Courcelette and Pozières. The Yorkshiremen played a leading part in this exploit, penetrating the hostile lines to a depth of 6,000 yards, across a position of great natural and artificial strength, against which army corps had broken in previous actions.

Although Thiepval had become more accessible, owing to the conquest of Beaucourt and the outflanking movement by Grandcourt, it was mainly due to the weakening of the general German morale that the amazingly rapid success in the opening of the last battle of the Somme was achieved. It was, however, only in patches that the German forces were disastrously weakened in spirit. There was fierce, prolonged resistance near the old mine-craters at La Boisselle, where English troops cleared the way to Contalmaison in the early morning of Sunday, August 25.

By that time Mametz was taken, and in the jungle of Mametz Wood a Welsh force was again established and was working up to the central crest by Bazentin. There was a great strategic change in the direction of attack between the first and second Welsh advances into Mametz Wood. In the first week of July, 1916, the British forces generally advanced from the south; in the last week of August, 1918, they came down on the Germans from the north and north-east, along practically the entire length of the Bapaume-Albert road. Instead of withdrawing north-eastward on Bapaume, the Germans retired over the vast, wild moorland on a south-easterly direction across the Tortille.

On August 24 the New Zealanders, in a resolute advance, broke into Loupart Wood, where a Bavarian garrison met the charging tanks with heavy fire. Then the defenders surrendered in a body, and the New Zealanders took the stronghold beyond the wood, fought through Grevillers and Bielvillers to the outskirts of Bapaume, and widened the front of the southerly flank attack against the Péronne and Tortille line of retreat. Above them, the north-country division, which had carried the Achiet junction, pressed the enemy back to Sapignies, on the Arras highway. This was a difficult position to hold, as the British Guards and 2nd division above the point were well across the road, and engaged in preparing an attack on the famous key position of Mory, by the upper Sensée river and Dead Man

upland. General von Below was alert to the peril to this part of his line. He had lost St. Léger, on the northern side of Dead Man, and English and Scottish divisions were closing on Croisilles and the approaches to the Hindenburg system. Henin hill was conquered, commanding the Sensée valley near the old German front. Little remained to Below of the ground he had won in March, 1918. Yet he had to cling to the four miles of high ground between Mory and Vaulx in order not merely to win time to put his original defences in effective condition, but to save the flank of the army of General von der Marwitz from being turned, far in the rear, by the Bapaume-Cambrai road. All the fresh forces he could safely spare from army reserve he sent towards the hills above Bapaume, intending by a great counter-attack to throw the British Guards and north-country divisions back to the railway embankment. At the same time Sir Julian Byng ordered the menaced troops to resume their advance and open the way for the New Zealanders to encircle Bapaume.

On Saturday, August 24, the pitched battle opened, with the opposing forces both in attack. Bavarians of the 36th division first engaged both the Guards and the north-countrymen and pressed them back. On the headland by Mory, forming the projecting pivot on which the British forces were designed to swing forward, the ground for covering the operations against Bapaume was lost by the Guards. The Grenadiers recovered the important headland with the bayonet, and extended some way beyond it. The north-countrymen, after resisting stubbornly at Sapignies, worked forward in the evening towards the village of Favreuil, in the hope of breaking through the weakened line by Bapaume. British airmen perceived hostile reinforcements marching from Beugnâtre. They were men of the 111th Prussian division, originally intended to drive in the British front by Sapignies, after the Bavarians had recovered the Mory headland. The airmen badly upset the Prussian force by bombing and machine-gunning it at close range. As scattering troops took cover in the ruins of Favreuil, and began to re-form for attack, the British barrage fell upon them.

Behind the heavy shell fire came the English infantry with tanks. The troops took the village at the point of the bayonet, and in the night worked across the hillside against the Germans, reaching Beugnâtre, on the Bullecourt road, some two miles behind Bapaume. Under cover of this wide outflanking

movement the New Zealanders tried to carry the ruins of the city, but found that the Germans were still maintaining many machine gunners in the wreckage, with strong artillery protection against tanks. Bapaume did not fall until August 29, when the entire hostile line between the town and the Somme withdrew in considerable confusion, after another and greater attempt at a counter-offensive made across the Bapaume-Péronne road by the army of General von der Marwitz. Yet this attempt was, although tactically strong, merely an acknowledgment of strategic defeat. The powerful forces which broke upon the British line, running sideways across the old battlefield by Thilloy, Eaucourt, Martinpuich, High Wood, Longueval, and Montauban, were largely obtained by a general withdrawal across the Somme of the armies which had been fighting by Chaulnes and Roye. Enemy rearguards left Roye on August 24, and Noyon on August 29.

This wide, sudden movement of retreat by General von Böhn's centre, in which a vast quantity of material was lost by firing or capture, was produced by the pressure on his wings from the British 3rd army and the French 10th army. It was accelerated by another British thrust, in which the manœuvring Canadians took a leading part.

The moat of the middle Somme enabled Böhn to hold lightly for some days his withdrawing centre, and before he evacuated the Roye line he retired his main forces over the river and sent them as reinforcements on the Bapaume-Péronne front, thus aggravating the already difficult task of the British divisions fighting down from the Ancre towards the Tortille. For four days, from August 25 to August 28, there was a struggle over the old fields of battle by Thilloy, Gueudecourt, Flers, Delville Wood, Longueval, Montauban ridge, and the broad valley running into Combles hollow. It was Böhn's way of ensuring against a rupture of his flank and keeping men and guns usefully employed there, while all roads behind them were congested with traffic under an increasing storm of aerial bombs, varied by gusts of Lewis gun fire from British and French machines.

It was on the fields above the Somme that Böhn had already won distinction. He knew the ground, and in several shrewd thrusts was able to drive back for a few hundred yards the New Zealanders at Bapaume, the Lancashires south of the town, and the Yorkshires, Welsh, East Anglian, London, and other British

THANKSGIVING AT AMIENS. This striking photograph shows a solemn mass in Amiens Cathedral on August 15, 1918, to commemorate the liberation of the city from the long-continued menace of the German guns. The battle of Amiens, August 8–12, 1918, which brought about this result marked the definite turn of the tide for the Allies. No fewer than 38,500 German prisoners, with 800 guns, were taken.

Alfieri

ROYAL VISIT TO ROEHAMPTON HOSPITAL. Queen Mary's Hospital, Roehampton, was founded in 1915, and there maimed soldiers were provided with artificial limbs. King George and Queen Mary visited the hospital in July, 1918, and are seen here chatting with a West Indian soldier.

Sport & General

REVIEW OF THE WOMEN'S ARMY. King George and Queen Mary visited the Aldershot area in June, 1918. This photograph shows the Queen when she reviewed a thousand members of the Women's Army Auxiliary Corps (the Waacs).

View of Château-Thierry after the town was retaken by the Allies on July 21, 1918. United States troops won distinction here in the battle known as Château-Thierry, fought in May–June, 1918.

A war-time scene in the Grand Rue of this old French town. It figured prominently in the early months of the war, and again in the summer of 1918.

CHÂTEAU-THIERRY, FRENCH TOWN ON THE MARNE

troops. The losses inflicted on the German commander's freshly engaged divisions, however, were out of all comparison with the small, transient recoveries of ground made in front of Le Transloy and Combles. Always the British troops returned to the attack with tanks, smoke-screens, and augmenting artillery power, recovering at times the undisturbed shell dumps which they had left in the retreat of the previous March. They wore down the fresh German forces, and when, on August 29, Sir Douglas Haig claimed that his men had completed the operations begun on the 8th of the month, and " rendered the enemy's positions on the old Somme battlefield untenable," more had been effected than appeared on the surface of things. Between Péronne and Arras the German armies were so exhausted that it was possible to initiate another great movement of attack.

When the New Zealanders entered Bapaume on August 29, 1918, the tale of prisoners taken by British forces since the opening of Sir Julian Byng's flank offensive on August 21 was said to have amounted to 21,000. In the slightly longer period of General Mangin's similar flank offensive, the French forces had taken some 15,000 prisoners. From the Sensée river to the Ailette river, between which Sir Julian Byng's and General Mangin's men operated, with the armies of Sir Henry Rawlinson, General Debeney, and General Humbert, the Allied line ran from the Hindenburg system at Hendicourt and Bullecourt, by Ecoust and Vaulx-Vraucourt, through Bapaume and Frémicourt, Beaulencourt, Morval, Combles, and Maurepas. Australian, Scottish, and English divisions stretched across the Somme by Hem to the western bank in front of Brie and Péronne. The French 1st army held the western bank of the river of battle beyond Nesle, and skirted the Canal du Nord between Nesle and Noyon ; the French 3rd army held the cathedral city of the Oise and the slopes above it, while the French 10th army, with United States reinforcements, had thrown forces across the Ailette by Champs, and entrenched on Crécy-au-Mont, Juvigny Down, and the hills above Soissons.

But all these lines of victory, running almost entirely through territory which the British and French had lost in the spring of the year, were not so immediately significant as the preliminary movement of advance of the British 1st army by the Scarpe river into fortified country which the enemy had strongly held since October, 1914.

CHAPTER 13

Advance to Victory—(I)

As a result of the extreme pressure which the British 3rd army, under Sir Julian Byng, exercised upon the enemy forces around Bapaume, the German commander in the last week of August, 1918, was compelled to guard his unattacked left flank by Arras with a division unfit for active work. These troops were placed in the old British lines at Monchy, Guémappe and Wancourt. Behind them ran the tunnelled Siegfried line of the Hindenburg system, in the rear of which was the Wotan switch-line, extending upward from Quéant to Drocourt. General von Below seems to have reckoned that amid triple fortifications so strong and extensive as those round Arras troops of even third-rate quality could at least hold out until good counter-attacking forces arrived. His intelligence officer reported that no signs of a British movement on the weakly held flank were evident, and that the Canadian corps was still absent from the British 1st army.

For the spring offensive in 1917 Sir Edmund Allenby had constructed beneath Arras a great system of tunnels through which large forces could be secretly and swiftly moved close to the hostile lines. During the German offensive in the spring of 1918 Sir Henry Horne, who with the 1st army extended down to the line formerly held by General Allenby, drew his front back towards the opening of the tunnels, intending to make use again of the underground series of communications for a surprise attack. There was delay in the execution of his plan. Instead of being a strong diversion calculated to force the Germans to cease attacking the British wings, the scheme became the culminating surprise in the system of offensives which Sir Douglas Haig and General Pétain arranged under the direction of Marshal Foch.

All the Allied forces in action in the last week of August, 1918, were apparently in a situation of grave difficulty. Under the direction of General von Böhn the German armies between Arras and Soissons were repeating the manœuvre of the withdrawal to the Hindenburg system. They had line after line of Sir Julian

Byng's, Sir Hubert Gough's, General Humbert's, and General Mestre's former battle positions on which to rest. Behind these trenches, dug-outs, and block-houses were the Siegfried, Wotan, Alberich, and other German systems, concreted and arranged for interlocking machine gun fire.

Ludendorff was at this time a sick man, and General von Lossberg was given practical control of the operations. Lossberg had made his reputation in the first Somme campaign, and had enhanced it during the defence of the Passchendaele ridge. By the end of the month he retired his northern operative wing from Bailleul, Kemmel hill and Estaires, thus escaping from attack by Sir Herbert Plumer and Sir William Birdwood. The leaders of the British 2nd and 5th armies had to reorganize the devastated marsh of the Lys valley before they could threaten the German 4th and 6th armies.

Lossberg also retired his southern wing. For a fortnight after its great victory between the Oise and Aisne the French 10th army, under General Mangin, was opposed in tremendous strength, the forces of General von Carlowitz being increased by 100,000 men. Marshal Foch had in turn to send strong United States brigades to reinforce the French and African troops of the 10th army in order to prevent the Germans from successfully counter-attacking from the heights above Soissons. But as soon as General Mangin was again in predominant power the army of Carlowitz evacuated the Ailette valley and the marshes of the Oise, and withdrew into a fortress system on the wooded mass of St. Gobain, leaving to the Franco-American forces the heavy task of reorganizing a new offensive from low-lying ground.

Time was what Lossberg required, and by retiring his wings and massing strongly against the French army of Champagne, under General Gouraud, he meant to make a fighting withdrawal from the Somme to the Hindenburg system, so saving and resting some 80 divisions of attack for the final contest. He expected Marshal Foch to drive in strength along the front of his recent victories, and thereby exhaust the Allied mass of manœuvre. In this case the new German commander intended to open a final offensive by Nancy. These were the circumstances in which the plan of Sir Henry Horne was put into operation.

At three o'clock in the morning of August 26, 1918, in cloudy gloom, with gleams of moonshine, action was opened by the Highland Territorials of the 51st division and by the Canadian

corps which had been moved from the Somme. They took by surprise the divisions holding the old British positions between the Scarpe and Cojeul streams. The Highlanders followed their line of attack of the spring of 1917, when they had the Canadians on their left, and advanced to the chemical factory of Roeux, the approach to Greenland hill and the ruins of Gavrelle. The Scotsmen worked along the Scarpe river to Pelves, protecting the left flank of the Canadians, who had met with considerable success. Setting out two divisions strong from the end of the Arras tunnel, they met at first with scarcely any resistance, and advancing through Guémappe stormed the flank of Monchy hill, disconcerting the German gunners, who were prepared only for a frontal attack. Before breakfast-time most of the ground was won. Then a fresh German division made a stand in the old Hindenburg line and on Wancourt hill. Stubbornly the Canadians still fought forward, winning the tower and upland of Wancourt in a long, fierce action ending in the early morning of August 27.

At the same time the Canadian corps swung forward from Monchy hill and, reaching farther than any British forces had done in previous actions against the Hindenburg line, seized the southern side of the village of Pelves just as the 51st division conquered Roeux and took the northern side of Pelves. This combined advance along both sides of the river Scarpe solved the problem of attack, for which no solution had been found in the spring of 1917. Fresh German divisions were hurried down the Lille and Valenciennes railways for a counter-attack. In the evening the Canadians were pressed back a few hundred yards in front of Monchy, but in general maintained their ground, and in conjunction with the 51st division prepared a further attack in which they stormed into the village of Boiry-Notre-Dame and, encircling Vis, crossed the Cojeul stream and captured Chérisy—positions for which the British 3rd army had vainly struggled in the spring of the previous year.

Above the Arras-Cambrai road the 51st division took the whole of Greenland hill, while on the right of the Canadians the 52nd division, which had turned Henin hill the previous day, broke across the Hindenburg line into Fontaine. At the same time the 56th (London) division, which had broken Below's troops on Vimy ridge at the end of March, made a resolute thrust across the downs to Croisilles, and after four days fighting, in which the 52nd division helped them by the turning movement at

Henin, advanced towards the battlefield of Bullecourt, while the British Guards were advancing across Dead Man Down and threatening the flank of the Hindenburg system.

In the afternoon of August 27, while an English division on Vimy ridge was advancing into Arleux-en-Artois, General von Below made another violent essay to prevent the coming disaster. By dividing his reinforcements he struck along the Douai railway against the 51st division and over the hills between Ecoust and the Bapaume road against the Guards, north-countrymen and New Zealanders. The Highlanders gave a little ground on Greenland hill. Round Bapaume the fresh enemy forces were so completely broken that the English troops stormed into Beugnâtre. Then, while heavy fighting went on by the ruins of Vaulx-Vraucourt and in the Hindenburg line between Fontaine and Bullecourt, the united wings of the British 1st and 3rd armies attacked the main Siegfried and Wotan switch-lines of the Hindenburg system.

On August 29 the 56th division returned to Bullecourt, after fighting their way to it for a week from Boiry-Bequerelle. Above them West Lancashire troops, after bitter fighting, entered Hendecourt-lez-Cagnicourt, above Bullecourt, and made an advance towards the catacombed hill position of Riencourt. The successes of the English troops brought them into line with the Canadians. Above the Canadian corps, under Sir Arthur Currie, English and Scottish troops vigorously prepared for the coming major offensive by advancing along both banks of the Scarpe river towards Plouvain, Eterpigny and Hamblain. Hour by hour the fighting increased in intensity as German reinforcements were sent to Douai and Cambrai in the hope of preventing the line from being completely broken. Portions of the villages of Bullecourt and Hendecourt were for the last time lost, and with them the rising ground of Riencourt.

The Middlesex and London Regiments clung to some of the ruins of Bullecourt, and gradually drove the German forces out of the factory and station works by Saturday, August 31. Greatly helped by whippet tanks which worked close to the redoubts, firing on them with light guns, the Londoners completed nine days of continual battle by an important victory. On their right Liverpool men and Manchester men stormed back to the positions of Ecoust and Longatte, which eastern county troops had conquered and then lost in the great German counter-offensive.

On their left other English forces recovered Hendecourt, and drove the Germans from Riencourt rise.

When night fell the British forces stood to battle between the conquered Siegfried line, through which the Hindenburg tunnel ran, and the Wotan switch-line, behind which the Germans had, in the deep, dry cutting of the north canal by Moeuvres, a third system of strong defences. Some 13 German divisions were packed into their second zone of works, including at least two divisions immediately released from the Lys front by the evacuation of Kemmel hill and Bailleul. Hundreds of additional guns were brought down from the north with the fresh infantry.

Sir Arthur Currie, the Canadian commander, had a harder task than that which he had carried out at Passchendaele ridge or along the Luce stream by Amiens. He put two fresh divisions in line, if troops could be called fresh after prolonged fighting along the Somme, followed by night marches back to Arras. Sir Charles Fergusson, commanding the British 17th corps, which was in action alongside the Canadian corps, placed the Lancashires and Scots on the right of the Dominion troops, who had on their left an English division to which they were particularly attached. Everybody in the British army appreciated the high importance of the action which was opening. Sir Herbert Plumer, with the British 2nd army, including an American contingent, began to press the retreating Germans on the Lys front to prevent them from detaching more divisions for reinforcing the central battlefield. Sir William Birdwood, with the British 5th army, struck at the ground by La Bassée and carried it.

Sir Julian Byng with his victorious 3rd army was deeply engaged in the central battle. Some divisions were fighting in and around the Hindenburg system, while others were struggling towards it. At the end of August the New Zealanders were driving beyond Bapaume towards Haplincourt; the English division alongside them was advancing towards Villers-au-Flos, and other British troops were closing on Le Transloy and Bouchavesnes. Along the Somme, General Debeney, with the French 1st army, was pressing across the river and the Nesle-Noyon line, and, above the Oise, General Humbert was hoping to open a path for his cavalry towards Guiscard. Both the French 1st and 3rd armies were converging towards Ham.

In the meantime the French 10th army, under General Mangin, tried to facilitate the success of the British 1st army by suddenly

resuming the offensive against the army of Carlowitz. General von Lossberg avoided the need for reinforcing the Oise and Aisne sector by arranging for his army commander to make a deep withdrawal to the Hindenburg works by La Fère, St. Gobain, and Craonne. The men whom he thus immediately saved went to increase the forces with which General von Below endeavoured to defeat the assault on the Wotan line between the Scarpe river and the Hirondelle brook. The Australians had reached the end of the blind alley on the Santerre plateau. They were in the old French trenches at Biaches and La Maisonette, facing Péronne, with the marshes and waters of the Somme making a wide moat, across which German machine gunners maintained a raking fire. Behind the town, from the historic artillery position of Mont St. Quentin, severe gun fire was directed day and night upon the Australian lines and communications. Faced with an unfavourable position, the daring Australian commander transformed it into a means of surprising the Germans.

There was a German bridge-head at Omiécourt, opposite Cléry, on August 29, serving as a delaying point against any attempt at a turning movement. It did not delay the Australians. The Omiécourt peninsula was carried, while exploring patrols were vainly trying to discover a practical path for troops through the morasses by Péronne. In the morning of August 30 the river was passed by Omiécourt, and then, in fighting lasting until midnight, Cléry was won and nearly a mile of ground beyond it. At night more bridges were erected and fresh troops crossed and continued the battle by Cléry, at the same time linking with other forces to the north.

At 5 a.m. on Saturday, August 31, the main action opened with an unusual movement. The Germans expected attack, and had strongly garrisoned the menaced front with men of the Alpine corps among others. The German commander expected that the Australians would follow a routine course and advance from the south and the west. This course was taken, but at the same time some New South Wales troops made a long march northward and obtained a new way of attack. Mont St. Quentin was one of the most formidable heights in France. Dominating all the country, it was screened on its south-eastern slopes by a thick wood, protected on the south by the wide marsh where the Tortille stream joined the Somme, and covered by the winding tributary along the other flank. In the Franco-Prussian war, as

in the later greater struggle, the height had been the key to all the Péronne area. It had saved Péronne from capture and Bapaume from encirclement in 1916. The Australians, thrusting from the north by Feuillaucourt, broke the resistance of the garrison, while another small body of attackers stormed up from the west and made 250 prisoners, and a third force struck between the hill and Péronne and increased the toll of captures. Over 1,000 prisoners were taken in this operation, and severe losses were suffered by the Germans. "Fighting was exceptionally severe," said Sir Douglas Haig, "and the taking of the position ranks as a most gallant achievement."

This advance caused an immediate retreat from Péronne. But the German corps commander turned every available gun on the lost height and on Feuillaucourt village that English troops had taken, and made very strong counter-attacks. These were repulsed after the temporary loss of certain positions. On September 1 the Australians captured Péronne.

The German army commander had been arranging to make a general stand in front of the north canal, running from the Hindenburg line at Moeuvres towards Péronne, and extending thence by Nesle to Noyon. By losing Mont St. Quentin he lost the Tortille river line and the canal just by it, and the rear of his forces facing the French 1st army was exposed. Troops from five divisions were captured, including Prussian Guardsmen and men of the Alpine corps. British brigades at once exploited the Australian break-through and made a rapid advance to Moislains, in the direction of the former Cambrai salient, while St. Pierre Vaast Wood and Azincourt were taken.

On September 2, while the German high command was perturbed over the far-reaching results of the Australian victory, the Canadian corps and the British 17th corps broke into and through the strong and more vitally important Wotan pivot of the German front. They cleared Hendecourt of German machine gunners and snipers, and regained Riencourt village, to which the Germans had returned in a strong counter-attack. British troops closed around Hendecourt at dawn on September 1, and in the evening of that day they stormed into Riencourt, winning all the positions needed as jumping-off places. At 5 a.m. on Monday, September 2, they were ready to advance on the right of the Canadian divisions through the Drocourt-Quéant, or Wotan, line.

Under so expert a gunner as Sir Henry Horne the artillery work of the forces of attack of the 1st army was excellent. Over ground conquered within a day or two, and so broken that cavalry could not be used, his men brought many heavy guns, as well as numerous field pieces, sited them, and stacked ammunition for a heavy barrage. In the same brief period a very considerable number of tanks were got into positions of attack. It was the day of the tanks. Without them the battle could not have been won, save at crippling cost. They rolled down paths through belt after belt of heavy barbed-wire, they wrecked machine gun works, and attacked the German infantry. General von Below had arranged a barrage of armour-piercing bullets and shell, and from every rise of ground his gunners fired at the British tanks, some of which were smashed.

On a winding front of some 12 miles, from the Scarpe river by Biache-St. Vaast to the Agache stream by Pronville, Englishmen, Canadians, and Scotsmen continued to advance under a creeping barrage. The Wotan line consisted of two groups of parallel ditches, forming the main and support systems, complicated by machine gun rear positions in sunken roads in the north, and by a triangle of trenches, pits, and tunnels in the south. The main system, showing in a line of dull white behind red hedges of rusted wire, was in places about half a mile from the British assembly positions, and for the greater part was carried with remarkable ease and rapidity. In the support system the defence was stronger. Yet at Dury village, in the centre of the attacked line, Canadians found the German town major and his staff asleep and surprised by capture a German officer leisurely riding with an orderly back to the line after a period of leave. There was a check of half an hour by the oblong hill by Dury, and the cart-way hollowed into the chalk slope behind it. This sunken lane was lined with caves and rimmed with machine gun positions, but the Canadians carried it after hard fighting.

At 8 a.m. Dury hill, commanding the Arras-Cambrai road at a point more than a mile in the rear of the Wotan line, was in Canadian hands. Here, in the Germans' communications, Canadian light gun batteries came into action, and half an hour afterwards the traffic of the Canadian transport was proceeding along the highway 1,000 yards behind the last ditch of the Wotan works. As Dury hill rose some 250 feet above the field of battle its tactical importance was great. South of it, and below

the Cambrai road, the Canadians stormed over another long stretch of the second Hindenburg system, which had been hastily constructed in the early spring of 1917, when the first system was partly broken by British attacks. The villages of Villers and Cagnicourt, with the woods of Loison and Bouche, were carried, a mile and a half behind the defences which both Ludendorff and Lossberg had regarded as impregnable.

North of the Canadian front of attack, English troops supported the main thrust. Above the Scarpe river some adventurous Lincolns worked into Valley Wood and fought at the power-station of Biache St. Vaast. The Germans protected the approach to Douai above this point by damming the river and flooding the countryside. They were also secured at Douai from a southern turning movement by the large natural morass of the Sensée stream near Lecluse. Here English and Scottish troops overran the German line by Etaing and Eterpigny, after the Canadian advance, and joined the Canadians in a further drive towards Récourt Wood and the Sensée marshes. These northern operations, however, were of a gradual, cautious nature, developing an actively defensive flank which served to guard the Canadian forces from any violent side thrust.

Lancashire troops played a conspicuous part at Bullecourt and Riencourt. They achieved further success by advancing from the right of the Canadians into the triangular maze by Quéant. The Scottish lowland division, which had been fighting for a considerable period, also did notable work. When these two worn divisions had broken into the German works the 63rd (naval) division came decisively into action after a forced march of 14 miles. They arrived in the afternoon and entered the deep salient created for them above Quéant and the Agache valley. They advanced far ahead of artillery or tank assistance, and, though enfiladed from the north, the Drakes, Ansons, Hoods and Hawkes, with Royal Marines and Royal Irish Rifles, made swift progress. From Inchy Wood they worked steadily forward in the evening towards Inchy village, behind the two zones of the Hindenburg line between Quéant and Moeuvres, and likewise behind the Quéant-Drocourt switch-line. The garrison of Quéant fled without a struggle, but when the Drake battalion closed on Pronville some prisoners were taken. The battalions were checked in front of Inchy, and for some days Moeuvres remained in possession of the Germans.

As will be seen from a map, the general position was of an extraordinarily paradoxical kind. The British forces were inside both the main and switch systems of the Hindenburg works, while the old British positions outside, by Boursies and Lagnicourt, were occupied by Germans who were still fighting on the Vaulx-Vraucourt hills. The German forces outside the conquered lines had hastily to retire. Their motor-lorries, guns, and carts crowded along the Bapaume-Cambrai highway towards the bridge across the north canal below Moeuvres. A considerable number of British gunners had their pieces registered upon the bridge section, and when it was thronged with German traffic they opened rapid fire, with observation aeroplanes watching the trapped Germans and signalling.

Meanwhile, the northern wing of the 3rd army, under Sir Julian Byng, which for 13 days had been pressing back the southern wing of the German 17th army, under General von Below, again lengthened the line of its offensive. The Germans attempted a counter-attack towards Vaulx, some six miles outside their lost Hindenburg line. Thereby they increased their losses, which included at the end of the day some 10,000 prisoners and about 100 guns.

When night fell the German 17th and 2nd armies began a general retirement to the north canal for a length of some 20 miles from the Sensée marsh below Douai to the spur of Mont St. Quentin above the Somme. General von Lossberg regarded the deep cutting of the great unfinished canal as the best anti-tank defence. For the first time since the battle of Cambrai the British troops advanced into a land of unruined hamlets and farmsteads, and there liberated French civilians who had not seen any Allied soldiers, except as prisoners, since the summer of 1914. Saudemont, Rumaucourt, Ecourt St. Quentin, Buissy, and Baralle were taken despite the machine gun rearguards with which the Germans vainly endeavoured to hold the ground.

By September 4 the British line was established along the west bank of the north canal, and the chief objective of the advance was gained. The Canadians were fighting in Sains, a memorable position on the flank of Sir Julian Byng's early thrust into the Hindenburg system. The naval division was meeting with strong opposition from the open slope of Bourlon Wood. In the burrows of Moeuvres, action was once more proceeding in the old familiar way, with parties of Germans working through secret

underground passages back to positions from which they had been driven on the surface. Inchy village was taken, the north canal was crossed, and a corner of Havrincourt Wood was reached. Southward, by Neuville Boujonval, the troops of the 3rd army had a large bridge-head over the canal, which was also crossed between Etricourt and Manancourt by forces which had advanced across the Bapaume-Péronne road. At Moislains the British had another bridge-head over the Germans' canal defences, and the Australians were working forward to the junction of Roisel.

The southern wing of the Australians developed the success of their northern wing by crossing the Somme at St. Christ and Brie and fighting their way to the line of the Péronne-Ham road at Athies. Generally, however, the three British armies, under Sir Henry Horne, Sir Julian Byng, and Sir Henry Rawlinson, resumed an apparent immobility in trench warfare. The Germans made no counter-attacks of importance, and behind the appearance of quietness a great amount of organizing work went on speedily over the stretches of conquered ground.

While the new offensive movements were being carried out, the British 2nd army, under Sir Herbert Plumer, attacked the German 4th army, under von Armin. As the Germans were continuing their gradual retirement towards the Messines ridge and Armentières, English and Irish troops drove them towards Ploegsteert Wood ; on September 4 they captured the tunnelled mound of Hill 63, an observation position of importance, and recovered the village. There was heavy fighting on the Wytschaete slopes, and the British 2nd and 5th armies swung back to the old front between Ploegsteert and Givenchy, which they began to reorganize for a further offensive.

While the five British armies paused to work after fighting, the French 1st, 3rd and 10th armies resumed their general pressure upon their front. In the night of September 4 General Debeney's forces crossed the Somme on a line of six miles by Offey, and, in cooperation with the Australians on their left, advanced against strong opposition to the Péronne-Ham road. They reached a point four miles from Ham and 12 miles from St. Quentin. In a linked movement the centre of General Fayolle's army group, composed of the men under General Humbert, made an outflanking thrust along the Autrecourt uplands and carried the town of Guiscard. Humbert's cavalry

rode into Chauny and extended the advancing line of the 3rd army to the same distance from St. Quentin as was the converging force on their left.

General Mangin, whose men were making their way through the lower forest of Coucy and organizing the deep stretch of recovered ground by the Ailette stream, renewed his pressure against the Germans' retreating forces. On September 5 the French commander ordered a bombardment of the wooded slopes in which continuous fighting had been taking place for a week. The German forces broke under the gun fire and retreated to the shelter of the main line of the Hindenburg system which stretched down from St. Quentin to the St. Gobain forest. This lower Hindenburg line ran in an arc along the western side of the St. Gobain upland from La Fère to Laffaux. Five miles eastward of the St. Gobain summit rose the hill of Laon, crowned with its cathedral, and surrounded with strong German defences. Southward, the ridge of the Chemin des Dames protected it with the upper Ailette stream and the Aisne and Oise canal. Westward was the flooded marsh of the Oise valley, northward the Serre line, and eastward a Hindenburg switch-line. Against the strongest sector of this intricate circle of defences the Franco-American forces of General Mangin pressed with such effect that the Germans openly acknowledged the great danger to their line, and brought a succession of fresh divisions to resist the thrust of his army.

When General Mangin's left wing was prevented from giving continual battle by the Germans' withdrawal to the Hindenburg line, on the St. Gobain hill, he turned again with his right towards the end of the Chemin des Dames, and once more furiously pressed the Germans in a swaying action by Laffaux. In effect, he forced General von Böhn to place his available reserves by the Aisne plateau, so that they could not be used against the French and British forces in front of St. Quentin.

In the meantime, General Debeney and General Humbert moved their men forward on either side of Ham on September 6, and the town was recovered. The next day Humbert's troops entered Tergnier, the southernmost point held by the British 5th army on March 21, 1918, and broke over the hills between Tergnier and Ham. The Germans fell back to the Crozat canal, but their positions were immediately outflanked by an advance from Ham, made by fighting along the St. Quentin waterway

by Artemps. Ham was the theatre of a scientific system of destruction. The Germans had spared the picturesque town in their retreat of the previous year, but before they withdrew their main forces from it on September 4 they placed infernal machines in all the houses, and connected these with electric firing lines running across the bridges. Long after the last German soldier had crossed the Somme, buttons were pressed miles away, and, as the bridges blew into the air, fires started which gutted every building in the town.

When, in the middle of September, 1918, the American 1st army on the Meuse began bombarding the defences of Metz the turn of the tide of victory in the west was completed. Henceforward, it was on a flood of important successes in all theatres of war that the forces of the Allies continued their advance to victory. Just as General Pershing finished his first operations on the Meuse, on September 15, the Bulgar and German divisions in the Balkans were pierced and routed by the Allied army of Salonica, under General Franchet d'Esperey. Then, before Turkey could establish a line to guard her European territory, her best armies were broken and captured in Palestine by Sir Edmund Allenby, who quickly extended his operations.

Though his prestige was much shaken by the British successes, Ludendorff remained at general headquarters at Spa, in the Belgian Ardennes ; for neither Hindenburg nor Lossberg, the virtual successor of Ludendorff, could disentangle the threads of his many schemes. Hindenburg seems to have been ready to strive to obtain terms before his armies were put out of action. Lossberg continued to hope, until the end of the last week in September, that he could extricate the German armies from the net in which Marshal Foch had entangled them ; and towards the middle of the month an attempt was made to solve the problem of the retirement from Belgium by opening, through Switzerland, informal negotiations for the evacuation of Belgian territory. King Albert and his government rejected the offer, knowing well that Belgium had become a vast salient in which the invader had trapped himself, so that he could not attempt a fighting withdrawal without an inevitable disaster.

It was the progress of the British 1st and 3rd armies through the Hindenburg systems between Douai and Cambrai that imperilled the great German salient in Flanders. Marshal Foch had already devised a series of new and powerful offensives on

either side of the Hindenburg lines which made the forcible reconquest of Belgium a certainty. The fresh British offensive was to be followed by attacks from the American, French and Belgian armies.

The new operations began with a series of preliminary movements on September 12, the day of the first American attack. The British 62nd division advanced for the second time into the Havrincourt position, and on the field of their victory of November, 1917, defeated the fresh German forces. Then, with other troops, they reoccupied the main Hindenburg line, stretching by the old Cambrai salient to the north canal. In the evening the Germans made a counter-attack from the air. A formation of low-flying aeroplanes swooped upon the men of the 62nd division as they were altering the conquered positions, and on the next day a heavy counter-attack was launched against the new British line, from Moeuvres and Havrincourt to Gouzeaucourt.

The Germans returned to the use of liquid fire, and behind their flame projector parties were strong bodies of machine gunners and infantry, who succeeded in breaking into the British positions. Havrincourt and Trescault were entered by the enemy, but in hard fighting, which lasted in places until nightfall, the Germans were driven out, and a considerable number of their men surrendered. This was the last serious reaction against the general British advance between Douai and St. Quentin. All old British battle positions were gradually won by the British 4th army and the French 1st army. Maissemy was carried on September 15, and on the following day the Australians broke over the country towards Le Verguier.

While the British and French forces were making their preparations for another great thrust in strength, General Mangin endeavoured to weaken General von Böhn's reserve by a flanking attack against the Chemin des Dames, running along the northern Aisne ridge. With his French, American and African troops, General Maugin had arrived at the end of the old Hindenburg line, running down from the rear of St. Quentin to the dominating upland knolls by the Laon road and the end of the Chemin des Dames. Almost within bomb-throw of his troops were the limestone caverns, quarries, and rocky dug-outs, against which the strongest of French armies had been checked in April, 1917. General Mangin had been in command of the operations on the Aisne under General Nivelle, and he held that

if he had been properly supported by the government of the period he could have broken through. All that afterwards happened showed that his judgement had been sound.

General Mangin, however, had changed his tactics as soon as he saw the tactical possibilities of the light French tank of the Renault type. Instead of trying to end the war suddenly, he tricked and worried the Germans into concentrating against him, and then launched his tanks before sending out strong patrols to capture the ground. This was somewhat the way in which General Mangin had first distinguished himself under General Nivelle and General Pétain in the active phase of the defence of Verdun ; but his machinery of attack had since been enormously strengthened by British and French inventors.

On September 14 he opened the struggle for Laffaux mill, Monkey hill (Mont des Singes) and other key positions on the Aisne ridge. General von Carlowitz knew that an attack was coming, and the Germans stood to battle in a strong front zone based upon the Hindenburg system around Laffaux. This was exactly what General Mangin had designed the Germans should do. He had already captured many prisoners from the opposing forces. When the German commander attacked with machine gunners General Mangin returned to his Verdun tactics. With parks of heavy guns, far exceeding in power those employed at Verdun in 1916, he bombarded all the German system between the St. Gobain forest and Vailly, on the Aisne.

The forces of assault then stormed towards the Laffaux plateau and took Laffaux by a turning movement, clearing the caverns of Allemant ravine at great speed. The strongest of the German points was Monkey hill, north of Vauxaillon. It had been transformed into a series of subterranean fortresses. When, however, Monkey hill was won, the victors had under view and fire the Germans' route of supply and reinforcement running along the Ailette valley to Anizy and Laon. Carlowitz made strenuous efforts to recover the lost rise, but the forward French guns were able to help the successful infantry. Both sides employed field guns at close range.

While the main flanking thrust towards the end of the Chemin des Dames was maintained by General Mangin, the end of the high ridge was also partly turned by a drive upward from the Aisne. Here Vailly was taken at the same time as the Laffaux upland was captured. Through the deep and steep ravine by

Jouy the lower flanking movement went on, while the main French force bombed and bayoneted its way by Fruty quarries towards the high crest at Cologne farm, which was only a few feet lower than the last dominating point at Malmaison. The position of General von Carlowitz was such as to incite him to the strongest possible measures of counter-attack.

His situation reflected upon the ability of his army group commander, von Böhn, and the high command. He was astride the Vesle ridge and astride the Aisne river, and extended across the Aisne ridge and the Ailette valley with French artillery flanking all the ridges and hollows which he occupied, and also bombarding from the south. Along the Vesle line the French 5th army, under General Guillaumat, was waiting for the pursuit to begin. As soon as General Mangin's men reached the Malmaison plateau, dominating the last German road of retreat at Chavignon, it was expected that the Vesle line would give and that Guillaumat's force would be able to drive forward.

Undoubtedly, Carlowitz and his superior commanders had placed too much confidence in the strength of the Alberich end of the Hindenburg system. They did not expect General Mangin to attack in such force. When the Hindenburg defences were breached and several of the great cavern shelters were captured, the German commander had to use up the last fresh reserves of the Böhn group of armies and send these forces across the open ground in incessant counter-attacks. These counter-attacks were so costly in life that their failure did much to bring the war to an end. By September 17 Mangin's divisions were within storming distance of the Malmaison summit, the key position to all the ridge and northern valley by which the Chavignon road to Laon ran. Some of the positions had been won and lost five times, but against all fresh counter-attacking forces the French front steadily moved forward, flattening out the high corner by the Chemin des Dames, on which the invaders' power of resistance was based.

The ground on the Aisne ridge, as was openly admitted by the enemy staff, was more important than even the St. Gobain Massif, against which General Mangin also continually demonstrated. The Hindenburg quadrilateral was endangered at its southern apex as well as on its north-western side. General von Böhn had to procure more reinforcements from the reserves of the army group of the crown prince of Prussia. This was what

Marshal Foch was waiting for. He had another pair of pincers ready. Lossberg was still bent on creating a mass of manœuvre for action in Lorraine, where the American 2nd army, under Lieutenant General Bullard, was seriously interrupting main communications by means of a heavy fire from 16 in. naval guns. In the hope of being able to gather force for shattering the menacing power of the American armies, by a thrust through the Lorraine gap between the heights of the Meuse and the Vosges mountains, the German high command took serious risks.

The forces north-west of Verdun were left comparatively weak, and the armies in Champagne were not strengthened properly. Craonne and the Vesle line were weakly held in preparation for retreat. General von der Marwitz's 2nd army, with the remnant of Hutier's forces, upon which General Rawlinson and General Debeney were closing, was left without strong reinforcements. Most of the men who could immediately be spared, after Carlowitz had been strengthened, were placed under General von Below along the Flesquières ridge, in the old Cambrai salient, for a counter-offensive against General Byng's 3rd army. . . . .

General von der Marwitz was considered by his high command to have acted in a very able manner in defence of the lower part of the Siegfried line, between the neighbourhood of Gouzeaucourt and the outskirts of St. Quentin. The German army commander constructed a great new outwork between Holnon Wood and Fayet, in order to cover the northern approach to St. Quentin. The new defence was in quadrilateral shape, excavated and built at uncommon speed after the breaking of Marwitz's line on the Somme. The third of the successive defeats of Marwitz occurring in one month, when the Australians stormed Mont St. Quentin, caused him further to accelerate the construction of new defences. He took the three former British battle positions on the ridges near the Scheldt canal, reversed them, made new machine-gun emplacements, and erected zones of barbed-wire along what had been the rear of the British lines. The greater part of this work was done during the week in which the German rearguards were holding, or retiring from, the temporary line of the middle part of the north canal.

While the former positions of the wings of the British 3rd and 5th armies were thus being strengthened and transformed along the undulations of chalk by Epéhy, Hargicourt and Francilly, Marwitz dragged his artillery across the moat of the Scheldt

canal and placed it well behind the old Hindenburg system, extending eastward of the waterway. He then had his grand battle position protected by the Siegfried line, by the cutting and tunnel of the Scheldt canal, and by three entrenched and thickly wired systems, successively dominating each advance by the British 4th army.

There was a depth of more than four miles in places between the Germans' first outpost zone and their main battle position. The only disadvantage in this scheme was that the masses of German field guns and medium artillery were removed so far away from the deploying ground of the assailing forces that they could not effectively curtain off the assault. Marwitz, however, remedied this defect by obtaining from his high command a large number of high-velocity guns. With these guns he was able to create barrages to a depth of 10 miles or more within the attacking lines. His design then was to stand on the defence with the German 2nd army, to meet all attacks with machine guns, infantry guns, and high-velocity barrages, and to inform the German 17th army, under General von Below, of the moment when a counter-offensive from the Flesquières ridge could be launched against the weakening British forces.

In outline the scheme was similar to the German counter-offensive at Cambrai in November, 1917, in which Marwitz had played an important part. Its scale, however, was much larger. With the line of resistance against the French 1st army and the British 4th army, and the line of attack against the British 3rd army, it covered a 30-miles stretch of country. Although Marwitz failed of success, he was at once promoted to the most important command on the western front, and sent to defend, with the German 5th army, the communications between Metz and Mézières against the American 1st army, under Lieutenant General Hunter Liggett.

Sir Julian Byng, whose forces were again threatened with penetration, when a portion of them were engaged in attacking a strongly reinforced enemy, was alert to the danger. His corps commanders were careful to stand strong on each main position they won while preparing for the next forward movement. General von Below had lost the poise and patience of his Caporetto days. As soon as reinforcements enabled him to recover from the blow which had sent him back from the Wotan line, he began to try to regain the north canal line. On

September 17 his men drove the Highland Light Infantry out of the pivoting point of Moeuvres, although certain survivors of the battalion made a most gallant stand. This was loud warning of something more to follow, and the British Guards, the 3rd division, with special memories of Moeuvres, and the 37th division, who were holding the neighbouring sector, awaited hostile developments.

On September 18 the British 3rd and 4th armies opened the attack which the German leader was waiting to turn to his purpose. Heavy rain fell at 2 a.m., and thereby upset an important element in the attack. Numerous tanks had been brought up in order to overcome the many new entanglements which the Germans had erected, and break into their strong points. The streaming rain, however, made the undulating chalk country so slippery that the caterpillar wheels of the cars failed to grip with their usual speed and power. This was an occasion when dummy tanks were used with notable effect.

Under a deluge at dawn the men went forward from Gouzeaucourt to Holnon Wood on the British front, and from Holnon and Essigny-le-Grand on the French front. In the centre were the Australians. Before them, on the ridge of Le Verguier, was a German garrison with orders to hold out to the last man. The attackers covered them with a smoke barrage which added so to the mist already veiling the country that it was an affair of anxious skill to keep direction and knowledge of the situation. Right under the shrapnel the men worked, and officers had to walk backward so as to face their men and watch that they did not get too far forward. As a result the Australians arrived with the shell-lighted fog cloud in the ruins of Le Verguier, and many of the German machine gunners abandoned their guns.

There were some sharp struggles in the old system southward, but the village was quickly taken, and 500 prisoners collected. Above this ridge, at the crest by Villeret village, a company of South Australians ran into a fierce machine gun barrage, but worked round by a wood and took 100 Germans, a field gun and a number of machine guns. At Hargicourt, where the British line had broken in the mists of March, the attackers again met with strong resistance, which they overcame. After breaking through the village a New South Wales battalion was checked by the obstacle of Cologne farm, when they were so delayed that their artillery barrage was extended towards the Hindenburg

line, leaving the infantry to fight forward unaided. The Germans turned field guns upon the attacking force, which was caught between two ridges, both manned by Germans firing down with rifles, machine guns, and cannon and howitzers. By steadiness and agility the Australians broke out of the trap. Their Lewis gunners shot the German artillerymen, and the infantry captured six quick-firers and four howitzers.

Meanwhile, the lost barrage was resting on the original advanced line of the Siegfried system. When the leading Australian division, the 1st, in clearing weather recovered the old British outposts, the guns again lifted and sent their shells towards the Hindenburg works. Over the moorland the Australian artillerymen advanced with remarkable speed, with their gun teams in small columns.

General von der Marwitz could not bring fresh forces forward quickly enough to save the front of the Hindenburg system. All the afternoon the Australians continued to advance. They went on fighting when night fell, and an hour before midnight the 4th division of the Australian corps entered the struggle for the system which Ludendorff had built in the winter of 1916. Extending the gains of the day, they took all the rest of the advanced works in their zone of assault. Practically every Australian battalion had fewer casualties than prisoners, and some counted a number of captives larger than their own strength. In spite of the ground, the tanks gave them good aid, some reaching the northern line as far as the Hindenburg works.

When day broke the Australians were lying out on a crest by Bellicourt, overlooking a brown, rolling waste of thistles and rank corn, on the opposing slopes of which could be seen the white parapets and wide belts of wire of the main Hindenburg system. Southward there rose against the sky-line the roof tower of the cathedral of St. Quentin. The Australians took a little more ground with some hundreds of prisoners to straighten out their line, bringing the number of their captives to more than 4,000, with some 40 guns.

On the right of the Australian divisions there was very stubborn fighting above and round the great new advanced work covering St. Quentin. English and Scots battalions, including Buffs, Shropshires, Sherwoods, Norfolks, and Durham Light Infantry, fought from Holnon Wood to Fresnoy, while the Camerons and Black Watch groped in the mist and smoke

towards Berthaucourt and Bellenglise. The Scotsmen took Berthaucourt, by the Hindenburg system, with ease. But there was hard fighting on the way to Fresnoy, where thick belts of entanglements had to be crossed under raking fire, and earth fortresses and linking trench systems reduced piecemeal. There was a quadrilateral by Gricourt, formed of a difficult complication of trenches; somewhat similar to the work captured by the tanks in the first battle of Arras. Here it was that the deluged, slippery ground left the attacking infantry with less assistance from tanks than usual. When night fell, the maze still held resisting groups of Germans.

By Holnon Wood, where the British and French lines joined, there was an extension of the formidable work, in which the Germans stood their ground and had to be rushed and turned and tricked and worn down. The French troops were less than 4,000 yards from St. Quentin, but between them and the city rose the two bastions of Round hill and Manchester hill. Between the hills and in front of Francilly village in the hollow was a formidable trench system, another part of the quadrilateral, with innumerable minor works about it. Sunken roads extended to St. Quentin, and with their high banks gave admirable shelter to both machine guns and artillery. Only a great tank offensive in favouring weather could have enabled troops to break quickly, without heavy loss, the outskirts of the town.

A deep thrust was not needed, happily for Sir Douglas Haig. All that he required of the French divisions was that they should form a defensive flank for the central advance, and occupy the Germans' attention round St. Quentin, to prevent them from concentrating along and over the tunnel section of the Scheldt canal. General Debeney used the method of infiltration which Ludendorff had copied and expanded from General Pétain. His patrols worked forward under short gusts of gun fire, and met dense groups of Bavarians and Prussians. Many prisoners were taken. The French had to work up a long glacis against a general barrage of heavy artillery and local cross-fires of bullets and small shell. Only the manœuvring power and endurance of the attackers saved them from winning their victories at too heavy a cost in life. Yet without in any way lessening their thrusting power in future operations, the divisions broke into Fontaine-les-Clercs and entered the ruins of Epine de Dallon, less than two miles from St. Quentin. On the south they worked

into Contescourt, reached Beney and Essigny-le-Grand, and linked with Mangin's army round the moated position of La Fère.

On the right of the Australians, the British Yeomanry division made a fine advance against the 2nd division of the Prussian Guard and against a much stronger fighting force of Thuringians. The Yeomanry had a very hard opening task, as their route ran through Templeux and its large area of quarried ground, where old pits and refuse heaps gave such opportunities of defence that the Germans captured in the preliminary attack boasted that the quarries could never be taken. The Yeomanry, however, achieved their objective, taking a large number more prisoners.

After the Yeomanry had taken Ronssoy almost in a stride, with a large number of prisoners, the Germans' resistance increased at Epéhy and Peizière. Eastern county and London battalions attacked these storm centres of many battles, and in the fog and smoke some companies lost direction. At Epéhy there were dug-outs, with earthworks reinforced by iron girders, through which no trench mortar shells could break. A force of the Alpine corps fought with high gallantry in this formidable redoubt, standing out until late in the afternoon, and so checking the Englishmen's advance that the Germans had the opportunity of launching the counter-attack which clashed with the last English movement.

In Peizière the Londoners left behind them in the fog more of the men of the Alpine corps. These hid in five redoubts, commanding the approaches to the village, and then emerged and kept their machine guns in continuous action. It took all day and part of the night to clear them out, and it must be admitted that they succeeded in carrying out the tactics of Marwitz's plan and seriously hampered part of the British advance.

By the old railway bend by Peizière and Epéhy was the Larkspur ridge and the line of Vaucellette farm, Chapel hill and Gauche Wood. Here the 21st division, which had made so fine a stand at Epéhy in the March battle, with the 17th division, were amongst the forces which combined in a drive back to the old British front line by Villers-Guislain. Along the deep ravines and up the steep ridges, battalions of Lincolns, Leicesters, Wilts, K.O.Y.L.I., Manchesters, Lancashire Fusiliers, Dorsets, and West Yorkshires, among others, were engaged in strenuous fighting. The Lincolns carried Vaucellette farm, the Leicesters and Wiltshires stormed into the Meath and Limerick posts. The

Germans at once came out in strength for their counter-attack, and met the Wiltshires at close quarters in Linnet valley. This counter-attack was repulsed, and the advancing troops continued towards their objective.

Meanwhile, on the left of the Lincolns and Wilts, the K.O.Y.L.I. and other Yorkshiremen fought onward to the outskirts of Villers-Guislain. In front of the ruins a German howitzer battery was sent galloping furiously into action, as a desperate measure for breaking the English advance. The Yorkshiremen surrounded guns and limbers, and captured officers, men and material of the battery. Then the Leicesters and Wiltshires in turn moved forward, after the action in Linnet valley, and, reaching the Germans' artillery positions, took eight field guns.

The 17th division, which had fought for 23 miles from the Ancre, practically without relief, carrying on their way Thiepval, Schwaben redoubt, Pozières, Courcelette, Martinpuich, Flèrs, Gueudecourt, Le Transloy and Beaulencourt, and the bridgehead of the north canal, penetrated into Gauche Wood. The Lancashire Fusiliers and Manchesters began with very hard fighting for old positions. The Germans were in superior strength, and the fighting became so mixed that, as parties pushed that way and this along the trenches, men were often prisoners one minute and captors of their conquerors the next.

One officer took a group of prisoners, who spied reinforcements and turned on their captor. The Englishman, before he could be removed, was reached by his men and resumed control of his prisoners. Yet again, a German reinforcement swept officer and men back to the road toward the prison cage; but for the fifth time more English stormed forward, and in the final charge the officer emerged with 130 prisoners. Slowly the troops of the 17th division fought up Chapel hill, in an action lasting through the night and continuing the next day. As the Dorsets and Yorkshires went on to their next objective they were counter-attacked by a fresh German battalion coming forward in a sunken road. They followed the same course as the Wiltshires, and afterwards conquered the ground assigned to them.

In the meantime, the Lincolns and other troops entered Gauche Wood and fought a hard battle. Four derelict British tanks had been converted by the Germans into machine gun posts, and nine German battalions were used in continual counter-thrusts, leading to a prolonged and apparently confused

tangle of combats. Yet Gauche Wood was added to the victories of the 17th division, and at the end of the fight the Lincolns and their comrades had many prisoners. Along the gully between Gauche Wood and Gouzeaucourt there was only a short advance to form a defensive flank during the attack over Chapel hill. Welsh and English troops encircled Gouzeaucourt village from the south and prepared with their registered guns to shatter any counter-thrust by the Germans against the left of the main forces of the assault. All the heavy counter-attacks which Marwitz launched, with increasing violence in the evening, formed part of the counter-offensive arranged by the German high command.

About 4 p.m. General von Below opened his long-prepared attack from the old Cambrai salient towards Moeuvres, Havrincourt and Trescault. The main weight of the assault was thrown over the north canal towards the Wotan line. On the left the British Guards held their line intact, completely crippling the German forces in front of them. The Guards then turned to their right, where they could see every figure in the moving masses marching from Flesquières ridge towards the canal line by Havrincourt. With rapid, aimed fire the Guards repulsed each wave of assault. The main attack was broken before it reached the British line. Two parties entered the British trenches north of Havrincourt, and another detachment struggled across the canal into a heavy barrage, and surrendered. As a result of the offensive of the British 3rd and 4th armies and the counter-offensive by the German 2nd and 17th armies 10,000 Germans were captured and 100 guns.

With the failure of the Germans' attempt to repeat their success of the early Cambrai operations, the war rapidly marched towards a decisive close. For a week minor operations went on between the north canal and the Scheldt canal. The Germans made local counter-attacks and the British replied. The undaunted Alpine corps and Thuringians remained on the battlefield waiting relief by the 121st division; and the Londoners, eastern county troops and Yeomanry resumed the tussle with their old opponents at dawn on September 21.

With a view to straightening out the British line on the left of the Australians, the Englishmen went out over the slippery ground between Ronssoy and Gauche Wood and fought into the Hindenburg outpost system. By midday the English infantry was apparently successfully established in the Germans' advanced

line on a length of nearly three miles, with some 200 prisoners. Then heavy counter-attacks developed. The Alpine troops and men of Thuringia, with fresh forces of the relieving division, stormed out from the Hindenburg main line, released their comrades who had been captured, recovered farm after farm, and by nightfall whittled down the English gain of ground to a quarter of a mile. In the rain and darkness the action continued. Once more old British trenches and ditches changed hands. Meath post was lost and regained, and other points in the Villers-Guislain gullies returned into the eddy of battle.

At midnight the Londoners and county troops made another attack from Epéhy and Ronssoy, took and lost one redoubt, held another, remaining at daybreak in a fragment of about a mile of outpost line. Day and night the rain fell and the mud deepened. In a return to old-fashioned trench warfare the troops of the British 4th army and the French 1st army tackled the great quadrilateral between Holnon and Fresnoy, gathering some 1,400 prisoners. On September 25 the sky brightened, and hot sunshine began to dry the ground. This was the weather for which Marshal Foch had been waiting, and he struck a rapid succession of blows from the Meuse to the Yser.

CHAPTER 14

Advance to Victory—(II)

THE year 1918 saw the wettest September that had been known for many years. Although the Allies managed to maintain a general offensive, the mud interfered with the speed of their enveloping movements. On the western side of the Argonne forest the French 4th army was suffering from the delays caused by the unseasonable weather. In Flanders King Albert's groups of armies were facing difficulties which must have reminded them of the hardships of the Passchendaele battles of 1917. Even when the Germans were thrown into the wet, low-lying ground eastward, the work of getting the guns of attack forward, repairing roads, and building new faggot and duck-board tracks across the swamps involved great labour.

The main task of the Germans at this time was to hold on to the Hindenburg defences between St. Quentin and Douai while

their broken northern wing retired in good order from the Flemish coast towards Ghent and the line of the Scheldt. As long as the Franco-American forces were prevented from closing the southern line of retreat to Metz, and the lower part of the Hindenburg system was held against the armies under Sir Henry Horne, Sir Julian Byng, and Sir Henry Rawlinson, there appeared to be no immediate danger of a general disaster.

On September 30 the British 5th army, under Sir William Birdwood, began to envelop Armentières from Fleurbaix between the Lys river and Lille, while the right wing made an advance towards the dominating Aubers ridge near Neuve Chapelle. This movement, however, was in the nature of a pursuit rather than of an attack. Everything that happened between the North Sea and the Vimy ridge was conditioned by the struggle north and south of Cambrai between the main forces of the British armies and the main armies of Germany. The reason why Sir Herbert Plumer could attack from Ypres with only four reduced divisions, and why Sir William Birdwood could only wait on events with another reduced force round Lille, was that Sir Douglas Haig was concentrating all his striking force against the half-broken Hindenburg system between Douai and St. Quentin. The main British forces were terribly worn. They had been engaged in battle since August, practically every army corps having been employed in continuous action. Although here and there positions had been taken easily, British losses on the whole had been heavy enough.

Along the Cambrai-Douai road the Canadians attacked at dawn on September 30. The German line ran by the railway between Cambrai and Douai at a distance from the road varying from 200 to 1,500 yards. The spurs of Cuvillers and Ramillies were held as redoubts to the Scheldt canal line. In a gallant endeavour the 3rd and 4th divisions of Canadian troops broke across the railway and pressed into the villages of Blécourt and Tilloy, swinging their front forward against the fire of machine guns. The German commander, however, had concentrated a great number of batteries by the Sensée river, and with these he broke into the northern Canadian flank, winning back the high ground by the railway.

The Canadian commander, Sir Arthur Currie, without allowing the reverse to develop into a serious disaster, withdrew his men, and spent the evening and the night in getting more guns

forward for a heavier barrage. On an arc of some five and a half miles and round the northern suburbs of Cambrai there were 11 German divisions against the Canadian corps and the 11th division and the 56th (London) division. Below the Canadians the divisions under Sir Charles Fergusson fought through Proville village to the southern Cambrai suburbs.

The Hawke, Hood, and Drake battalions of the 63rd, or Royal Naval Division, led the storming attack across the moat of the canal, crossing the water by single planks, or wading through it, always under a heavy barrage of machine gun fire. Day and night the struggle for the bridge-head went on, and, desperately strong as the German resistance was, it was borne down by noon on Monday, September 30. The 63rd division then formed up on the eastern side of the canal and, joined by other English troops, endeavoured to break the Germans who were resting on the knolls and crests by the Masnières road. Again, however, the Germans held the approaches to the city with great determination, and the British 17th corps was checked south of the city at the same time as the Canadian corps was thrown back on its right. The British 6th corps also failed to take its main objectives. At Rumilly village the Yorkshires of the 62nd division, who had made a notable advance across the Scheldt canal at Marcoing, were held up by flanking machine gun fire from rising ground near Cambrai. On their left the New Zealand division also forced the Scheldt canal, and made heroic but unavailing efforts to get into Crêvecœur.

Thus, on the entire front of the Cambrai battle of September 30, the Germans were able to claim that their defence had succeeded, but they were unable to hold all their line against the British attack. English troops recovered the difficult ground at Villers-Guislain, over which a struggle had swayed for weeks, and captured Gonnelieu on the left, and made an advance on the right to Vendhuille. This removed the last German salient bridge-head, and brought the British front everywhere down to the Scheldt canal. The success of the southern wing of the British 3rd army had the effect of enabling all the British 4th army to develop the advantages gained above St. Quentin. Over the hidden waterway, in the gap of three and a half miles between the moat of the German system, the Australians, with their American recruits, attacked up the Hindenburg system towards Bony, and bombed up the second line towards Le

Catelet. Three rested German divisions had been hurried forward, including the 2nd division of the Prussian Guard and the 21st division, both of which had suffered heavily at Mont St. Quentin. Their fortnight's rest had not restored their strength, and the Australians and Americans broke through them and reached the outskirts of Bony, the village at which the northern part of the advance had been held up for two days. There was very stiff fighting in the labyrinth of surface trenches and underground workings, and the attackers continually found machine gun fire coming from the railway track and sunken road marking the course of the canal tunnel.

The canal was led through a huge cutting to a depth of 80 feet below the hillside, where the tunnel began. Over the entrance the Germans had built a concrete partition, extending on a bridge from tow-path to tow-path, and leaving only an open space a few feet above the water-line. Within the great underground waterway, finished under Napoleon in 1810, the Germans had collected barges, which served as bunks in the long, unwholesome underground barracks. At intervals shafts ran up to the surface, enabling the garrison to slip into the trenches above in the event of an attack. This they did in an attempt to stem the American and Australian assault. When on September 30 the Australians captured the commander of the 2nd battalion of the 2nd Prussian Guard, together with battalion headquarters records, they found that the battalion only numbered 90 men.

At the end of the day the Australians emerged from the wide zone of former battles and passed into a green, unbroken country. On their right the 46th division had worked against bitter opposition into the bend of the railway between Joncourt and Le Vergies. They were relieved by the 32nd division, who rapidly developed their decisive success by a brilliant advance into Le Tronquoy. This was another underground fortress, where Napoleon's canal burrowed again under a hill for nearly a mile before flowing into St. Quentin. Some of the ground on the left was recovered by a strong German force, but the Englishmen and Scottish Highlanders reconquered it, and then broke another counter-attack on their right. Here the British 1st division, forming the linking force between the British 4th army and the French 4th army, protected the flank of the advance by storming the hill and village of Thorigny. As the British went forward General Debeney's troops worked

through Omissy, a canal village about one mile north-north-east of St. Quentin, thus completely turning the city on the northern side. In the vain hope of saving St. Quentin from any further general destruction, the French commander refrained from battling in strength through the streets, and went on with the thrusts through the hostile main lines which the encircling British armies had begun, giving good aid to the British divisions by Thorigny and Le Tronquoy.

Below St. Quentin the 1st army of France made an advance towards Urvillers and Vendeuil, while the 10th army, under General Mangin, strongly increased its pressure along the Chemin des Dames above the Aisne. An Italian contingent carried Soupir, working in rear of the German forces along the Vesle river and driving the Germans back towards Laon in swift rushes. The German army commander refused to withdraw directly northward because of the danger of the British attack on his communications. He held on with great determination to the block of heights between Reims and the Aisne so as to maintain a road of retirement to the Meuse.

The Germans were left in a deepening salient between the wedge made by the forces of General Gouraud in Champagne and those of General Mangin. German headquarters ordered an immediate retreat from the Vesle hills, and the movement was arranged to take place on October 1.

General Berthelot, who had returned to the command of the French 5th army, divined the German plan, and upset it by opening an offensive at 5.30 a.m. on September 30. On a front of nine miles the infantry went forward without artillery preparation, crossing the footbridges over the Vesle almost without loss. By the time the Germans opened fire from their closely-placed machine gun posts the Frenchmen were well over the water and storming the hill-sides. There was hard fighting on the left, in the villages of Revillon and Clennes, but the Germans were generally caught in a state of confusion, with their artillery moving back, and at least one of their supporting divisions on the march. This division (of Bavarians) was brought back in haste to make a counter-attack. This made little impression on the French troops, who, in the evening of September 30, moved to the objectives fixed for October 1.

In the night the Germans precipitated their retreat from the St. Thierry heights, west of Reims, and the French 5th army

rolled onward towards the Aisne-Marne canal, with a far-reaching effect upon all the German front. Once more Marshal Foch had succeeded in striking the Germans unexpectedly in a weakened sector, inflicting heavy losses upon them and also extending the line of incessant strain. The combined fronts of battle from the Yser in Flanders to the Moselle in Lorraine, on which 12 armies of the Allies were engaged in intense attack, formed a single conflict between millions of men on a front of 200 miles.

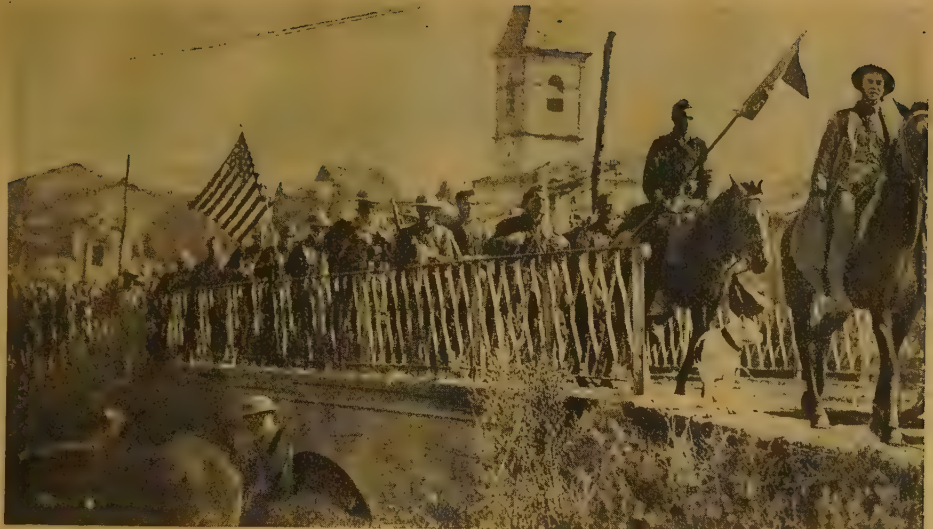
From the approaches to Thourout to the neighbourhood of Verdun only the British 5th army remained for the time out of the general offensive. The army of Belgium and the armies under Degoutte, Plumer, Horne, Byng, Rawlinson, Debeney, Mangin, Berthelot, Gouraud, Liggett and Bullard were all in violent action. This effort did not exhaust the resources of Marshal Foch. Although he had nearly twice as many armies in operation as Marshal Joffre had commanded in the first action by the Meuse, he still had men, guns, shell and trains to spare for an organization of battle in another direction. As the United States divisions continued to arrive in France, a force of some 600,000 men, with 3,000 guns and hundreds of light storming cars was being gathered under General de Castelnau for the final attack through Lorraine into Rhenish Prussia.

At the time, however, the German high command reckoned that it had survived the grand crisis in the war. On October 1 both wings of attack were floundering in the mud. In Flanders some of the forward divisions of assault could not be fed, owing to the extreme difficulty of communications, and as the Germans were multiplying their machine guns and their artillery, bombarding all the ground as far back as Ypres, and probing the Allies' advance line in quest of an opening for a counter-offensive, it seemed at first safest to draw the troops back to the point at which supplies could reach them. This would have seriously interfered with the plan of King Albert, whose aim it was to press the Germans out of western Flanders and the Lille district by continuous local attacks between the general battles. The necessity was avoided, and while waiting for roads to be built behind them, they cut the German communications between Roulers and Thourout. The British 9th division completed the conquest of Ledeghem on October 1, while other troops under Sir H. Plumer forced the Lys, quickening Quast's

retreat from Lille. In the night this retreat began, by a wide withdrawal from Armentières, the La Bassée salient, and Lens. South of the endangered German 6th army the 17th army and 2nd army, directed by General von Böhn, were again held in battle all along the Scheldt canal line. Again the Canadians were unable to capture Cambrai, but they loosened the Germans' hold upon it by inflicting heavy losses upon them.

Sir A. Currie had brought up his guns to balance the artillery of some 11 divisions which General von Albrecht had massed for the defence. The York and Lancasters of the 11th division fought over the Epinoy spur, while with a heavy barrage the Canadians returned to the Cuvillers and Ramillies hills. The Germans had more heavy guns ready and fresh infantry forces in reserve. Their defensive curtain fire fell five minutes after the barrage of attack opened, and their machine gun fire immediately met the Canadians. The British artillery, however, was the stronger. It broke a broad path for the attackers, and by 9 a.m. they had reached the northern stretch of the Scheldt canal at Morenchies and Eswars, outflanking the city, while climbing the Batigny spur on the left. Above them their English comrades made an advance of equal importance.

Desperate measures were taken to hold Cambrai for a few days longer. General von Albrecht resorted to the method of mass attack in order to press the Canadians from the Scheldt line. The Canadians had to fall back by Blécourt, half the distance of the total advance made earlier in the day. A Toronto battalion, however, held on by Cuvillers for four hours while surrounded, and after covering the withdrawal on either side cut its way back. According to prisoners, of whom the Canadians took many, the explanation of the severity of these counter-attacks was that General von Albrecht had been given special forces for saving Cambrai by a grand return offensive. But he was anticipated by half an hour, with the effect that his plan was entirely annulled, and he could only use his unusual number of men in preventing a break-through. In the night of October 1 Albrecht had won a local action and lost the main battle. He had stood his ground in Cambrai at a cost in life which left the German forces between that city and St. Quentin so weak that they could not hold the remainder of the Hindenburg defences. The Canadians had also suffered heavy losses in the operation.



Imperial War Museum

AMERICAN TROOPS MARCH BACK AFTER VICTORY. Long before the Americans were in the line they had helped to solve the pressing problem of reserves: next they fought brigaded with other Allied troops; and finally they took the field independently in the St. Mihiel sector, where they succeeded in capturing the salient on September 12–13, 1918. Here a body of them is seen passing through the French village of Nonsard, flags flying, on return from the victory

Imperial War Museum

AN AMERICAN CONVOY BOUND FOR ENGLAND. America's entry into the Great War was attended by the problem of arranging transport for her thousands of troops to the fighting areas. Although a considerable portion of the Atlantic Ocean was open to German submarine attack, the troop-carrying ships were brought through with an extremely low rate of casualties by the system of convoy in which the ships were escorted by destroyers or cruisers and by one or more armed merchantmen. The photograph was taken in May, 1918.

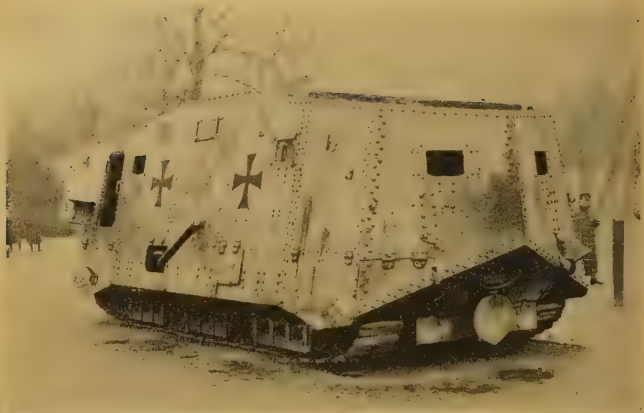
Royal Tank Corps

The tank did not displace the ordinary armoured car, whose greater speed makes it useful for reconnaissance work, in which this pair were engaged when photographed on August 25, 1918.

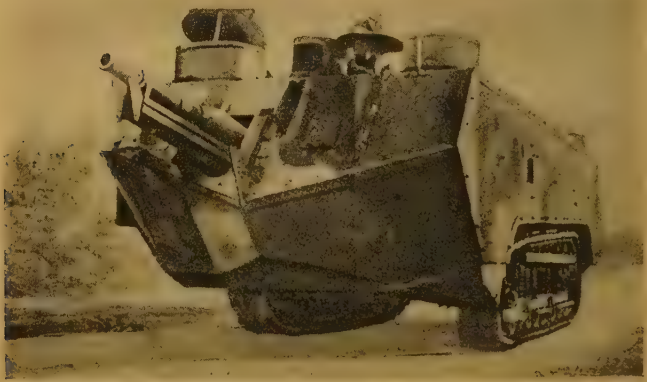
Col. J. F. C. Fuller

So great was the alarm of the German command at the advent of the British tanks that they issued a special armour-piercing rifle, of which a captured specimen is here seen in the hands of two gunner officers (Bapaume, August, 1918).

MECHANICAL CAVALRY AND AN ANTI-TANK RIFLE



The photograph shows a German tank, introduced at the close of the war. It was captured at Bapaume in the British advance in August, 1918. Tanks, which were a British invention, first appeared in action on the Somme, September, 1916.



Following the example of their British ally the French constructed tanks. The illustration shows a later type of French heavily armed tank which was used in the Champagne campaign of 1918.

FRENCH AND GERMAN TANKS : A CONTRAST

A SERIOUS OBSTACLE

In places the Hindenburg system was already passed, leaving the Germans with only the practice trenches, in which the shock troops of the 2nd army used to train for their assaults. South of Cambrai there was even an artificial shell crater area in front of these positions, but it soon became a real one. After the ground had been cleared near Proville, while the naval division tried to turn Cambrai from the south, English and Irish troops fought forward to the suburbs, reaching somewhat nearer to the centre of the town than the Canadians were on the other side.

A serious obstacle was the rise of Mont-sur-l'Oeuvre, by the city, from which a raking fire held the Yorkshires in their attempts to take Rumilly. The 2nd and 3rd divisions resumed the Rumilly action, and, after another long tussle on October 1, the rise was carried by troops of the 2nd division, enabling the Scottish Fusiliers and Shropshire Light Infantry to work round the eastern side of Rumilly, while the Suffolks outflanked it on the west. The advance was extended by the 3rd division into open country towards Séranvillers, outflanking Cambrai to the distance of a mile. The New Zealand division, on the right of the 3rd division, finished their work in Crêvecœur, and worked beyond it to the upland from which they had been swept by fire.

Farther south the Australians cleared the ground for another attack in force on the last system of the Hindenburg line. They worked up to the hill by Gouy, and, with a line of light tanks, stormed beyond Joncourt, captured part of Estrées, and arrived in front of the Beaurevoir line, a prolongation of the Masnières system which had checked Sir Julian Byng in his first thrust towards Cambrai in November, 1917. On the right of the Australians the leading divisions of the British 9th corps were engaged in a continuous struggle for Sequehart, in which they twice captured a remnant of the garrison, numbering some hundreds, but yielded the village to strong counter-attacks.

Meanwhile, General Debeney's northernmost division captured Lesdins, by the source of the Somme river. The canal was crossed at St. Quentin, and Moy village, by the Oise, taken. By the Oise-Aisne canal the Italian corps of General Mangin's army continued to fight forward against a strong rearguard, while General Berthelot's troops conquered all the heights west of Reims, taking some 3,000 prisoners and 20 guns.

October 2 was a day of preparation along the main fronts of conflict. In Flanders the 29th division of General Plumer's army captured Gheluwe, the village bastion of the Menin gateway, while Bizet and other outworks of Lille were taken by other men of the 2nd army. The British 5th army began to work forward all along its front at 8 a.m., four hours after the Germans left their line. Patrols of Lancashire, Scottish and Irish troops overtook small stray German parties in the deserted positions, and gradually gained the Aubers ridge, from which they could look for the first time on the city of Lille, with the sister towns of Roubaix and Tourcoing to the east. The underground city of La Bassée was explored, and the new German line reached by the Haute Deule canal, extending between Lille and Douai. Lens, with its wrecked, flooded coalmines, was occupied, together with a large stretch of country which had been reduced to a wilderness. There was a brisk engagement in the colliers' village of Cité St. Auguste, which the Gordon Highlanders had reached in the battle of Loos, and Uhlans were seen acting as a rearguard by the suburbs of Lille.

October 3 was a day of clear sky and bright air, and the ground rapidly became good for ordinary traffic and for tanks. General Rawlinson resumed his offensive immediately. On October 3 he attacked with the Australian corps and the 9th corps on a front of some 10 miles between Le Catelet and Sequehart. The Germans' last strong line of works formed a curve resting on the Scheldt canal at either end. By Le Catelet and Gouy, where they still held the northern entrance to the canal tunnel, English and Irish troops stormed the bulwark which had resisted all attacks during a week of battle. Early in the morning the first British advance swept beyond the underground waterway, and the garrison held out with their machine guns, trusting in their moat to save them from defeat. But they were attacked directly in front by Englishmen and Irishmen, who crossed the canal and stormed the fortress.

The Australian 2nd division, which had fought all the way from the valleys by Amiens, was faced by much superior numbers of Germans holding the Beaurevoir line. It was a system of concrete redoubts, with front and support trenches deeply wired, extending round the rim of a saucer-shaped position, which was reckoned impregnable when constructed in the latter part of 1916. The chief obstacle to the Australians was

the branch canal, running between Mont St. Martin and Estrées, which was reckoned to contain nine feet of water. When all the ground to be attacked was covered with a British smoke barrage, through which the barrage of attack travelled with tanks and Australians closely following it, the Torrens canal was found to be passable. The infantry went to it with the bayonet and broke counter-attack after counter-attack. They fought for six hours around Beaurevoir in a fog of gas, and in the afternoon they firmly established themselves in the last zone of the Hindenburg defences by carrying the fortress of concrete at the eastern end of Estrées. In the evening they further advanced over the high ground between Beaurevoir and Montbrehain villages, taking a ruined windmill and farmstead from which they could sweep the houses and streets with machine gun fire. Montbrehain was captured early in the day by Midlanders, who took prisoners from 38 German battalions, representing eight divisions, in their sweep from the right.

For eight hours the advanced force, the 46th division, held Montbrehain, inflicting losses on the counter-attacking German forces. At last sheer weight of numbers told, and with forces hurried up from St. Quentin and Cambrai, the Englishmen were driven back. But they held to Ramicourt and Wiancourt, and ended the day with more prisoners to their credit. Scotsmen and Englishmen of the 32nd division once more captured Sequehart village, and broke every counter-attack. The French 1st army joined in the battle between Sequehart and Lesdins, and also made a strong demonstration from the eastern side of St. Quentin and round the southern heights by Itancourt.

In the meantime, when the German commander's new concentration of all his forces between the Meuse and upper Aisne was very incomplete, he was called in another direction instantly to find more reserves to save his front from being pierced. Between the marshes by Douai and the Scheldt canal near St. Quentin the British 1st, 3rd and 4th armies had prepared with remarkable rapidity for a further offensive. Hundreds of guns and great stores of ammunition were brought up over the late battlefield to be used against the Cambrai defences.

When the attack was launched the 1st Canadian division broke across the German line above Bourlon hill, and, linking with other brigades, helped in driving a broad wedge up the Arras-Cambrai road reaching close to Raillencourt and

Haynecourt. By the afternoon British troops had overrun the Germans' works for a depth of five miles, capturing 4,000 prisoners and 100 guns. Their advance, however, left them with a long exposed northern flank, and von Below made a sound counter-move by hurrying fresh forces from the south of Douai for an attempt to defeat the Canadians before they could dig themselves in or obtain full support from their guns. His move had been foreseen. On the left of the Canadians were troops of the 11th division. They passed through the Canadian line, carried the strong point of Oisy-le-Verger, and extended the new Cambrai salient to Epinoy. Also the Londoners of the 56th division advanced along the Palluel marshes, while on the northern side of Douai the village of Arleux-en Gohelle fell into British hands.

This extension of the advance, by providing new tasks for the fresh German forces, saved the Canadians from the threatened flank attack. In the evening the Germans made violent counter-attacks which were generally repulsed. With the help of the engineers, who had constructed a number of bridges over the north canal, the 1st Canadian division was able to make another important advance across the Douai-Cambrai road. Tanks and guns crossed by the bridges, and the tanks climbed Bourlon hill and destroyed machine gun posts in Raillencourt.

While Cambrai was thus being enveloped from the north west and west, units of the 17th corps, under Sir Charles Fergusson, passed over the dry gap of the north canal. After carrying the canal works by Moeuvres they worked towards Cambrai from the south-west by the Bapaume road. They were checked south of the ruined highway at Graincourt, but they outflanked this village from the north and passed on to Anneux. At this point men of the 57th division gained further objectives, and enabled the 17th corps to move on towards Cambrai.

Except for the smoke-screens employed to cover infantry and tank manœuvres and attacks, the atmosphere was brilliantly clear in the latter part of the morning. Forty-three enemy machines and a number of enemy balloons were brought down, enabling the Royal Air Force to exercise an important influence on the course of the battle. The German artillery was then retired very hastily across the Scheldt canal. On Flesquières ridge was a strong German garrison, but the Guards broke into the Germans' rear at Orival Wood, and with the aid of tanks

cleared the Bapaume-Cambrai road. Troops of the 3rd division distinguished themselves by a rapid advance from Havrincourt in the direction of Ribécourt. Flesquières was taken, and, after gaining the spur running towards Marcoing, the drive was continued towards the Scheldt canal.

The 62nd division took up the attack on Marcoing, and on the right the 5th and 42nd divisions engaged in heavy fighting on Beauchamp ridge, where all night there was a struggle with counter-attacking German forces. A further advance of two miles was made in the morning to the Highland and Welsh ridges. South-west of Cambrai the Lancashires of the 57th division, who had cleared the way for their corps, fought in the night towards the canal, and with the naval division and troops of the 2nd division, veterans of the early Cambrai battle, closed upon La Folie Wood, Cantaing, Fontaine-Notre-Dame and Noyelles. At the end of the first day of the resumed offensive the British 1st and 3rd armies had 10,000 prisoners and 200 guns, with Cambrai in their grip.

In the night of the same day, Friday, September 27, the enemy high command endeavoured to increase its reserves in the centre by retiring the army of Carlowitz from the Chemin des Dames. To avoid another wasting struggle with General Mangin's 10th army, the German commander retreated through Pinon forest, abandoning Malmaison fort and a considerable stretch of the Laon road. But the withdrawal came too late. General Mangin's long push forward had produced its full effect, by both weakening the Germans at one of their strongest gathering points and by leading them so to thin out their forces eastward as to enable General Gouraud and General Pershing to break into the vitals of the Hindenburg system.

Meantime, as has already been indicated, affairs were going no better for the Germans in the more northerly sectors of the line. Under King Albert, the Belgian army and the British army, with the monitor divisions under Admiral Keyes, opened the battle of Flanders on a front of 20 miles, from Dixmude to Ploegsteert. Operations began at midnight on Friday, September 27, 1918, by the monitors starting a heavy and deep bombardment off the coast. Admiral von Schröder and General von Armin retained a local reserve of some three divisions between Ostend, Bruges and Thourout, and it was the aim of Admiral Keyes to attract and fix these forces near the shore,

so that they should not be able to enter the first critical phase of the land battle. In spite of rough weather and the rain the naval gunners with their big guns swept the German heavy batteries at Knocke, and then massed upon Zeebrugge, the Bruges canal and other centres. Naval aeroplanes dropped bombs which wrecked or damaged the network of railways in the battle area, and, joining with British and Belgian land machines, attacked gun-pits and troops.

On Saturday, September 28, the Belgians entered Houthulst forest. They set out in heavy rain, and in spite of the difficulties of the ground and the heavy losses they sustained they advanced to near Zarren on the north. In the centre they took Houthulst and approached Staden after breaking several counter-attacks. On the south by the Passchendaele ridge they stormed Broodseinde. At the end of the day, after an advance of four miles, they had 5,000 prisoners and 300 German guns, many of which were in action against the Germans before the evening. Moorslede was appointed the grand common objective of the two cooperating armies.

General Plumer's 2nd army group was a small one, and into this phase of the battle he threw battalions of the 9th, 29th, 35th, and 14th divisions. At little cost to themselves they broke and pursued the Germans on a front of four and a half miles on either side of the Menin road. Bercelaere was taken in an advance of five miles. The 29th division fought through Gheluvelt and swept over Kruiseecke. The 35th division carried Zandevoorde, and thence continued to a depth of nine miles. The Wytschaete-Messines ridge was turned, and, although strongly held, was taken by other divisions of the 2nd army.

At the close of the first day of the last Flanders battle General Plumer's army stood close to Menin, on the line occupied by the 1st and 7th divisions, under Sir John French, at the opening of the first battle of Ypres. The successors of the "Old Contemptibles" then had taken 3,600 prisoners and 100 guns. The Anglo-Belgian victory was one of the most immediately decisive of all Allied successes on the western front. It liberated the Flemish coast, which the enemy began in extreme haste to evacuate; it imposed a breaking strain upon the last reserves, and it greatly added to the confusion of the Germans.

Throughout Saturday night the army group under King Albert continued to press the Germans and work towards the complete

conquest of the Flanders ridge, on which depended the German hold on the Lille and Lens district as well as their control of the Flemish coast. While the German high command was devising expedients to enable its northern wing to retire in good order, Sir Douglas Haig struck another blow. At dawn on Sunday, September 29, 1918, the British 4th army, under Sir Henry Rawlinson, strengthened by two United States divisions, under Major General G. W. Read, and assisted by the French 1st army, under General Debeney, swung into the battle opened by the British armies.

For two days, since the morning of September 27, General Rawlinson's gunners had maintained heavy incessant gun fire upon the hostile forces in front of them. The main weight of the new attack fell upon the German forces holding the old Hindenburg line by the Scheldt canal between Bellenglise and Le Catelet. A brilliant success was won by the North Midlanders of the 46th division by Bellenglise. Screened by a thick fog, the leading Midland brigade crept to the Scheldt canal carrying life-belts, scaling-ladders, lead lines, and ropes, with rifles, ammunition, bombs and entrenching tools. Against a machine gun barrage and curtain shell fire the men swam the canal or hauled themselves across on ropes, and made good the German bank. They then formed up in line in the valley between the ridge on which the Hindenburg system rested and the line of heights from which their guns were firing. The Germans had an intact bridge across the canal, which both forces refrained from destroying—the British because they hoped to use it, and the Germans because they hoped to trap some of their foes upon it.

The Germans did not use the bridge, having a tunnel running for 3,000 yards from the canal to their main line of works on the ridge. The German tunnel system extended far northward and connected with the long tunnel through which the Scheldt canal ran. In the Midlanders' sector the Germans had constructed a tunnel under the canal which could shelter a brigade during a bombardment, and serve also as a safe communication. While the troops engaged in canal crossing were swimming or hauling themselves across the waterway, one corporal with a small party worked from house to house in Bellenglise and arrived at the western end of the intact bridge, which was held by two machine gunners. These he killed. Then he sprinted to the other side of the bridge under a hail of bullets—none of which touched him—

and engaged the three German sappers who were preparing to blow up the structure. Two of them he killed and the other surrendered. He asked his prisoner to show him the wires which had been fixed for firing the mine, and having been shown these he cut them, and so transformed the bridge from a trap into a passage by which the division crossed with guns and supply trains, with the fog still serving as a smoke barrage.

Then followed the operation of the German tunnel. Both ends were seized, but machine gun fire prevented any exploration. The Englishmen, however, captured a howitzer, fired it down one end, and received an offer of surrender. They expected a few Germans to come out, and were amazed at the force concealed under the ground behind their advance. There were almost 1,000 Germans waiting to emerge and cut off the advanced bodies of Englishmen and stop reinforcements. They went to swell the total of 4,000 prisoners, with 20 guns, which the Midlanders took at a comparatively light cost to themselves.

Half a dozen light tanks crossed the canal and tried to come to the help of the infantry, but they were taken under flanking fire from a hill. It was the infantry who had to come to the help of the tanks. They made a straightforward, uphill charge with the bayonet, and the effect of their deep advance across the seemingly impassable canal was felt all along the line and opened the way for the capture of St. Quentin and a great advance eastward. The Americans stormed forward over the sunken Scheldt canal, advancing by Bony through two zones of the Hindenburg line and reaching to a great depth at Gouy. Below this point they also passed far beyond their objectives, and after seizing Bellicourt and Nauroy reached out to Joncourt. Australians found them still fighting at Joncourt on Monday, September 30, and on Tuesday, Englishmen, forcing the canal by Vendhuille, released more of them who had been deeply encircled by Le Catelet for three days, holding off continual attacks.

The Australians were in immediate support to the United States troops, and their engineers were working hard on the tracks by which they were to advance and pass through the United States troops. From some American assembly trenches, which had been won from the Germans in a local action two days before the general battle, heavy machine gun fire swept the leading men in the supporting divisions. In the southern half of the front, where the Americans had attacked Bellicourt, the Germans

had not returned to their original outpost line. On Sunday afternoon the Australians spread out fanwise from Bellicourt and Nauroy, and seized part of the second Hindenburg system by Cabaret farm.

Some American troops joined forces with the Australians, and by nightfall this combined force had captured some 2,000 prisoners. Four German divisions were disorganized by the American advance, and three other German divisions, including one of the Prussian Guards, were rushed up to save the situation and hinder the following attack by the Australians. The Germans, however, only fought to save their guns, and afterwards withdrew in good order.

While the 4th army was turning St. Quentin, and breaking through the three zones of the Hindenburg system, the 3rd army continued the encircling movement south of Cambrai. The 62nd division, having forced the Scheldt canal at Marcoing, enlarged their bridge-head, fought through Masnières and Les Rues Vertes, and made a daring advance towards Crêvecœur and Rumilly. On their right the New Zealand division worked towards the canal, while the struggle for Rumilly continued. Above the 62nd, the naval division, helped by the 2nd division, made an important advance from Folie Wood to the southern outskirts of Cambrai, while the Canadians forced an entrance into the northern suburbs of the city. Southward the 12th and 18th divisions cleared the approaches to Vendhuille.

At German headquarters, Hindenburg, Ludendorff, and Lossburg were left utterly without hope of being able to avoid complete and rapid disaster. So far as their calculations went at the time, it seemed quite impossible for them to retire their troops in good order or strengthen them for a few weeks longer. Prince Max of Baden, heir presumptive to the grand duchy, was summoned to headquarters, and was entrusted with the task of obtaining from the Allies the best possible terms of peace. For this purpose he was appointed imperial chancellor in the place of Count von Hertling. According to the statement afterwards made by him, Ludendorff, on Sunday, September 29, 1918, was in a condition of blank despair, and wanted nothing but any kind of peace, if it could be immediately obtained. Hindenburg agreed with this view, but Lossberg, Böhn, and other actual managers of operations were opposed. Keeping their heads and working steadily they saved for a time the German armies, and

while Prince Max was opening negotiations with President Woodrow Wilson, the struggle went on.

At the time that these parleys were taking place the decisive struggle in the war had reached its last critical phase. Between September 27 and October 4, 1918, the main forces of the British armies had broken through the German lines and reached open country. The Hindenburg system was described very fully at the time by a German military writer, General von Ardenne, who still firmly believed that the defensive position was impregnable. He remarked :

> Englishmen call our defensive front the Hindenburg line, and thereby show they fail to grasp the real character of our defences. We have no line, but a complicated, four-sided system of redoubts and fortifications extending from Cambrai to La Fère, a distance of nearly 40 miles. The system, however, has a depth of 25 miles, so that, instead of having to penetrate a line, the enemy has to destroy a granite block with an area of 1,000 square miles before he arrives at a position to deploy his forces in complete freedom and direct his attacks to high strategic ends. The conquest of the Siegfried works and its collateral positions would only form the overture to further developments, removing the objectives of the entente armies into the twilight distance. Time is an ally of the German high command. At rapid pace winter is approaching, and by robbing Marshal Foch of his African troops it will reduce the French armies by from one to two-thirds of their active strength.

The writer went on to remark that, after the check to the American army's dangerous advance along the Meuse, the German high command, having solved its railway transport difficulties, intended to wear its enemies down in the struggle for the extensive Hindenburg system and deprive the Allies of their renewed offensive energy. The Hindenburg system, however, was not so solid a block of fortifications as General von Ardenne described. Its characteristic was length rather than depth. It originally extended from the neighbourhood of Lens to the neighbourhood of Metz, and after being strengthened westward by the Drocourt-Quéant switch-line and the Masnières-Beaurevoir secondary line, it was further supported by southern lines running along the Serre and Sissonne, and connecting by the Hunding line with the Aisne defences and the Argonne works.

The British victories in the Siegfried line and Wotan line, between Arras and Cambrai, followed by the rapid conquest of

part of the middle Siegfried line and its Masnières switch between Cambrai and St. Quentin, threatened to turn the lines of defence southward between the Aisne, Serre and Sissonne rivers. Although the Germans had temporarily succeeded in making a strong stand along the southern Hindenburg works against the American and French armies, there remained to them on the western face of their fortifications only a few miles of intact works, extending from Beaurevoir village to Fonsomme village by the Scheldt canal. Behind this last fragment of the western Hindenburg works was rolling, open, well-watered country, already partly reached by the British armies. Through it ran, by Le Cateau, the railway supplying the German front from St. Quentin to Laon. There was the Maubeuge railway, in particular, which was the Germans' chief lateral line of communication with Cologne, connecting by Le Cateau with the Brussels and Valenciennes lines, and by Busigny and Bohain branching toward Guise, Hirson and other bases for the Serre and Hunding line and Champagne front.

Le Cateau, Busigny and Bohain were only a few miles behind the Hindenburg works at Beaurevoir, which had been constructed to protect them. Relying on the moat of the Scheldt canal, with its old and new tunnel refuges, and the maze of fortifications broadening over six miles of ridges, cuttings and hollows, the Germans had not excavated and concreted any further support system immediately in front of the Le Cateau Bohain railway lines and junctions. Sir Douglas Haig had refrained from attacking this section of the German system in 1917 because of its incomparable strength, due in part to the skill with which the Germans had so sited their lines as to allow no good artillery positions to the attacking forces. Confirmed in his view of his strength by long freedom from attack, the Germans had only a few practice trenches behind their Hindenburg system, and in order to win time to dig new entrenchments they stood to pitched battle in front of Le Cateau. Under General von Böhn the German 17th and 2nd armies combined for the last stand along a well-fortified line against the British 3rd and 4th armies.

Sir Douglas Haig's grand objective was Maubeuge and the line to Hirson. His thrust was made along the rear of the army groups of General von Böhn and the Prussian crown prince, and while he aimed at forcing the Germans back to the

Ardennes forest, they were to be broken also by the Franco-American thrust along the Meuse towards Sedan. The problem was whether this great converging movement could be completed in the early winter of 1918, or whether rain, mud and incessant fighting would tire out the armies of the Allies and compel them to allow the Germans to rest and reorganize in the middle of winter. There were grounds for supposing that if Hindenburg were able to move his forces slowly back in good order Germany would not be too discouraged by the retirement or the defection of her Allies, which was occurring at this time.

On October 5, 1918, Sir Henry Rawlinson's Australian and British corps made good their hold upon the Montbrehain and Beaurevoir works in a preliminary operation for the decisive battle. On the left the Australians set out from Ramicourt village, at the foot of the hill on which the Montbrehain works were constructed. The Australians had some 600 yards to climb before reaching the outskirts of the hill fortress, and the Germans, who expected the attack, met the advance with an intense machine gun barrage and heavy shell fire. The Australians, however, were able to reach Montbrehain and hold it against counter-attacks.

On the right, by Beaurevoir, the attackers had a more arduous task. Ever since the line had been taken there had been constant in-and-out fighting in this key position. The Germans had counter-attacked, recovered the village, and held it. It was not until after tanks had crawled up the spur with the infantry of attack that Beaurevoir was definitely conquered at the point of the bayonet. The Germans still made several attempts to hold this point in the Hindenburg line, but in the end abandoned it with the loss of 1,000 prisoners. All the Terrière upland, in the bend of the Scheldt canal between Crêvecœur and Le Catelet, was given up by the Germans.

While the struggle was raging round Beaurevoir hill the New Zealand division and the 21st and 38th divisions worked over La Terrière plateau and occupied the main Hindenburg line in preparation for a closing attack upon the last fragment of the Masnières switch which originally extended from the neighbourhood of Marquion, behind the Wotan line, through Masnières and Rumilly and Beaurevoir. This line stretched from Niergnies hill, south-east of Cambrai, to Esnes, Walincourt and Villers-Cutréaux—the last point a small town near a hill dominating

the captured Beaurevoir position. From Villers-Outréaux northward to Lesdain remained some five miles of unbroken line, running on low ground behind formidable belts of wire and covered by positions on the eastward slopes. The Germans also occupied some foreground posts on the westward slopes of La Terrière plateau, but these were won from them at the end of the first week in October by small fierce actions, such as that at Mortho farm. At the southern end of the line the French 1st army made a determined local advance to Remaucourt, two miles beyond the Scheldt canal, bringing its line up to a level with that of the British 4th, 3rd and 1st armies.

At the same time the northern divisions of the British 1st army drove the wing of the German 17th army from the old Hindenburg line north of the Scarpe, recovering Oppy and Fresnoy and capturing the Fresnes-Rouvroy trench system. Douai was approached from the south-west at Biache, and menaced directly southwards by the British Epinoy spur. In the southern suburbs of Cambrai were the 57th division, and on their right the 63rd division. The 2nd division worked alongside the 3rd division, and on their right were the New Zealand division and the 37th and 21st divisions. Next came the 30th division, the Irish and Englishmen of the 66th division, and the Englishmen and Scotsmen of the 25th division, the 30th U.S.A. division and the 6th division.

Supporting these 12 divisions of assault were eight other infantry divisions, which with two cavalry divisions were ready to take full advantage of a break-through. General von Böhn had 24 infantry divisions in line, together with a special force of machine gunners sent from general headquarters. The German army group commander did not expect to be assailed in strength for some days, and was completely surprised by the speed and force of the Allies' movement. The weather was very unpromising on the night of October 7, and storms made the assembling of the troops an affair of great difficulty. The certainty in the minds of the German staff that no attack would be possible in the heavy rain laid them open to surprise.

The battle of Le Cateau opened at one a.m. on Tuesday, October 8, and the Welsh of the 38th division, under Major General Ramsay, led the assault on the commanding Villers-Outréaux position. With the 124-Metre and 147-Metre hills beside it, this small town formed an important outer fortress

to the German general line with enfilading fields of fire against an attacking army. The position was so strong that a frontal assault in daylight was impracticable, so the Welsh troops went out in the storm at night and slowly worked forward over the slippery ground and through deep wire entanglements, where they had to grope for the lanes made by their guns. German outposts gave the alarm, and from the edge of the town there came a machine gun barrage sweeping every way of approach and checking the assault. The tanks, however, were able to advance and enter Villers-Outréaux followed by the infantry. By the early morning a number of prisoners had been taken.

The final attack on Le Cateau was divided into two separately timed movements. At 4.30 a.m. the forces of the 3rd army came out in the darkness in a fine interval between the rainstorms. Sir Julian Byng's divisions attacked from the south of Cambrai to the ridge opposite La Terrière, where the action at Villers-Outréaux was now seen to be a preliminary to a pitched battle. It seemed that the British intention was to turn Cambrai by a great movement from the south, and as the defending forces on either side of the city were much worn by the intense, prolonged struggle with the Canadian corps, and the British 17th and 6th corps, the German commander hurried his last reserves towards the road running south from Cambrai.

By this time all the front between Cambrai and St. Quentin was under gun fire, but the Germans reckoned that the artillery action of the British 4th army and the French 1st army was but a feint. Both these armies had been strongly in action up to October 5 and 6, and, as the German staff probably knew, the Australian corps, the northern American division, and most of the 9th British corps had been relieved in the line. With these excellent troops of attack withdrawn, the German commander felt safe on the southern part of his front, and decided that the gun fire there was a demonstration to prevent defending forces being shifted towards Cambrai. From the beginning of the summer campaign Sir D. Haig had hit with one army or army group, while his other forces were organizing their conquered ground for an alternate attack. But it was not so in this case.

Sir Henry Rawlinson had been strenuously preparing while fighting, and with the reinforcement of two United States divisions he had been able to keep a strong army reserve ready to develop at once the advantages won in the opening offensive

against the Hindenburg works. About 40 minutes after the British 3rd army attacked, the British 4th army came into action, lengthening the front of battle to 17 miles. Then the French 1st army further extended the line of conflict for another six miles. The result was that General von Böhn used his reserves too quickly, concentrating them northward, and before he could redistribute the troops his last entrenchments were overrun, and the cavalry were riding through open country.

South of Cambrai the German resistance was, in the circumstances, very strong. The troops of the 57th division, under Major General R. W. R. Barnes, who for 10 days had been fighting their way into the suburbs, made another determined attempt to enter the city by the Faubourg de Paris, and there formed a defensive flank protecting the advance of the 63rd division. It was the Anson, Hood, and other battalions of the naval division who opened the main operations. In a striding assault, right across the southern defences of the city, they took the village of Niergnies, on the Cambrai-Bohain road, and thereby instantly and directly threatened the large garrison between them and the Canadians with envelopment.

By 8 a.m. von Albrecht, commanding in and around Cambrai, was in extreme danger, and once more there was dispatched to his line a large portion of the reserve. The naval division was counter-attacked in strength, and for a time lost Niergnies. In the course of the morning the Germans gathered from the railway line at Awoingt and the Le Cateau highway and, collecting in a sunken road, recaptured the village. The Germans used captured British tanks to assist them in this action, and it is said that a captured German field gun was used at short range to disable them. The naval division then recaptured Niergnies. During the night Cambrai fell. The Canadians entered the city, and in the early morning of October 9 linked up with a patrol of the 57th division which had worked from the southern side.

The 2nd division, under Major General Pereira, attacked the village of Forenville, alongside the 3rd division, under Major General C. J. Deverell, which advanced on Seranvillers. Both of these forces belonged to the 6th corps, which had the Guards division in support. The leading battalions of the 2nd division, after taking Forenville, shared in the struggle against the counter-attacking force which had pushed the naval division back for a time. A fresh German division—the 208th—brought

from the St. Quentin sector, was launched against them, with the effect of delaying their progress to the Cambrai-Bohain road, but the slight, temporary strengthening of the German line which resulted from this reinforcement was in the end of grave disadvantage to them, for they were to discover that their real strength was needed in the southern sectors. The brigades of the 3rd division took Seranvillers. They met the counter-attack from the Le Cateau-Cambrai railway line, with the 2nd division and naval division, let some light tanks through to Wambaix about midday, and with the forces on their left advanced towards the railway at nightfall.

At daylight on October 9 the three divisions were moving on the main road to Le Cateau, by Igniel and Estourmel, having crossed the road to Bohain and the railway to Busigny. On the right of the 3rd division the New Zealanders, under Major General Sir A. H. Russell, had a difficult task between Lesdain and Esnes. The Germans, however, were in force in the numerous concrete works built in the sides of the winding hollow. Very heavy fighting took place, but the New Zealand division carried the village of Esnes, and by night were before Wambaix.

Near them were the 21st division, whose objective was a stretch of the Hindenburg system between Esnes and Villers-Outréaux. The trenches at the foot of the ridge were full of Germans who escaped a preliminary bombardment, and when pressed they fell back to a labyrinth of works in orchards, cottages, farm-buildings, and woods. One brickyard that withstood all infantry attacks was cleared from the air by contact pilots, who first dropped bombs and then swooped low with machine guns in action, driving the garrison to earth and allowing the attacking force to close. At the end of the day Malincourt was won, but the village of Walincourt, northward on the Cambrai-Bohain road, was still fiercely defended. The garrison, however, withdrew in the night; they found the net closing round them.

Beyond Villers-Outréaux, where the Welsh division preceded the general movement by a local attack on the enemy's centre, the 66th division, under Major General H. K. Bethell, and the 25th division, under Major General J. R. E. Charles, fought towards Le Cateau. The 66th division advanced down the Roman road leading past Le Cateau to Mons, and quickly captured Serain, reaching past the German field artillery to a

battery of 8 in. howitzers. A counter-attack resulted in a temporary set-back, but a further British assault regained Serain.

This action, along the historic path of the retreat of the 5th and 3rd divisions after the first battle of Le Cateau, on August 26, 1914, was the decisive event of the struggle. In the afternoon five broken German divisions fell back from the Serain crossway, where the highways to Le Cateau and Bohain met. The Germans had prepared a scheme of general destruction, but most of the explosives they had placed were not fired. They had no time to think of ruining the countryside. East of Serain the country was less damaged than it had been in 1914.

On the same day (October 8), the 6th division and other English troops made a sharp advance to Beauregard, by the Bohain-St. Quentin road, and there formed, by nine o'clock in the morning, a defensive flank to the main thrust towards Le Cateau. Then on their right the French 1st army skilfully attacked on a front of some six miles against the Fonsommes end of the Beaurevoir line to the neighbourhood of Ribémont, on the Oise river. In their first advance the French carried the maze of strong works near the sources of the river Somme, and against continual counter-attacks worked over the fortress ground extending about the sunken roads by the St. Quentin-Le Cateau railway line.

General Debeney's divisions had to struggle against one of the strongest sectors in the old Hindenburg system. There were, for instance, caverns made to shelter 3,000 men, and containing tunnels from which sorties could be made against the rear of the forces, bombing their way under the cover of shell fire through the works. In the course of the day 500 prisoners were captured beneath a single farm, and another 1,500 Germans were collected, usually in small groups, during the progress beyond the railway line. The British troops and the American division took 2,000 prisoners and some 200 guns in the course of the day, and the Royal Air Force, skirmishing far in advance of the infantry and swooping upon all the roads of retreat, added greatly to the German losses in men and artillery.

In the night of October 8, 1918, the German 2nd army was thoroughly disorganized. There were no reserves available to bring up. General von Böhn could do nothing more than order a fighting retreat to the Selle river, by Le Cateau, and arrange with headquarters for some fresh troops to be sent as speedily as

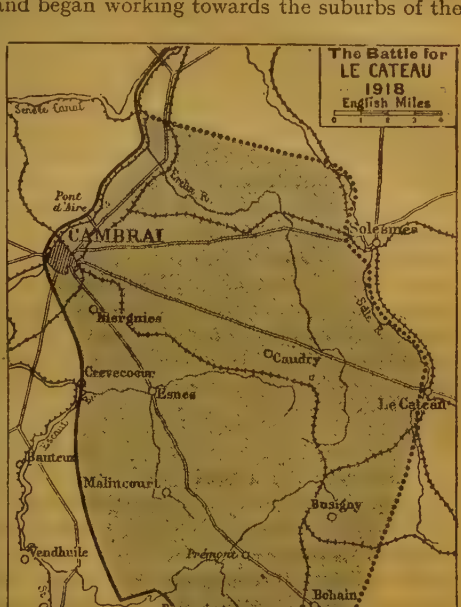
possible to the new river line to stiffen his army. But Sir Douglas Haig, with General Fayolle directing the French army group between the Oise and the middle Aisne, pressed the advantage won on and round the Le Cateau road with such speed and striking power that no reinforcement of the German 2nd army could be effected in time to prevent the reverse from developing into a disaster. Early in the morning of October 9 the British 1st, 3rd, and 4th armies and the French 1st army advanced to exploit to the uttermost the decision achieved the previous day.

All the great German salient of St. Gobain and Laon was cut by Sir Douglas Haig from the north. To a considerable extent General Fayolle's army group of the French 1st, 5th, and 10th armies had its work taken away from it by the British victory. General Mangin, in particular, who had steadily ground down the strength of General von Carlowitz's forces, had but to gather a last harvest by pressing his old enemy in front, while the British troops were cutting the German communications far in the rear.

There was thus a double problem for the German high command and General von Böhn to solve. They had to withdraw the armies of General von Hutier and General von Carlowitz from the St. Gobain and Laon sectors, along the routes from the Serre line, below Hirson. Some of these routes were already crowded with the troops and transport of General von Eberhardt and General von Mudra's army, withdrawing from the Craonne and Reims front under severe pressure from the French 5th and 4th armies. The German forces, streaming upward from St. Gobain, between the Oise and the Peron rivers, succeeded in gathering strongly by Guise, where the Oise bends westward towards Hirson. This movement saved for a time the outflanked Serre line of the great Hindenburg system from being enveloped by the French 1st army, but it could not be extended far enough to cover the middle part of the Maubeuge railway lines, which the British 3rd and 4th armies instantly menaced.

On Wednesday, October 9, Sir Julian Byng and Sir Henry Rawlinson moved infantry, cavalry, tanks, and guns forward over the open country towards the Selle river. At the critical point of Serain the Connaught Rangers, with other Irishmen and Lancashiremen, went forward along the road to Mons and took Maretz. Then the Dragoon Guards and Canadian Horse rode through them, and carried the old battle positions at Troisvilles and Reumont, and the Fort Garry Horse took Cattigny Wood at

a gallop, opening the way for the Scots and Surreys to Clary. The cavalry then reconnoitred Le Cateau, but found it too strongly held by machine gunners to make a sweeping charge practicable. So the 66th division, with the 25th division, came up in the evening and began working towards the suburbs of the town in an enveloping movement. South of Le Cateau German machine gunners held strongly to positions by the village of St. Benin, and northward they had a half-made but useful trench line running to Solesmes.



After fighting into the western side of the town the British infantry had to wait for artillery support. They could well afford to do this by the Selle as this upper course of a small stream, with the railway line by it, and the Germans' incomplete trenches, formed a position that was little better than an open field warfare obstacle, against which the new method of attack with smoke-clouds, fast tanks, and intricate barrages was likely to prevail. The Germans were busy putting up defensive works, but these did not enable them to stand for any length of time.

The great success of the second day was the capture of Bohain by the American and British wing of the 4th army, which had closely approached the town the previous night. About the same time Busigny junction was also stormed, and the railways feeding the Germans' St. Gobain and Laon sectors were thereby cut some 30 miles in the rear. Along the northern branch line running to Cambrai, which the Germans had used for their counter-attack the previous day, the British cavalry were so quick in action that the line was conquered in a very useful condition. The town of Caudry was attacked from the south, in a movement against the long flank which the German 17th army formed, while drawing off behind Douai and retiring its forces from the Wotan line in front of the city, under strong pressure from the British 11th division and other northerly forces of General Horne's 1st army.

While von Below was withdrawing to the Haute Deule at Douai, to keep in line with von Quast's retreat to the same canal line against the British 5th army, he used the men he obtained by shortening his front to strengthen his southern flank covering Solesmes, Le Quesnoy, and the approaches to Valenciennes. As far as Lille and Tourcoing in the north, and Gobain and Laon in the south, the victory of General Byng's and General Rawlinson's forces told with instantaneous effect. The Germans had to withdraw with the utmost speed from the ends of their broken line, both to prevent complete disaster and to save divisions to reinforce the broken centre. The end of the Wotan line, by Drocourt, was thus easily reduced.

Below Douai the vigorous attack by the Canadian corps, through the German rearguard in Cambrai, led to another important result. Breaking through the city, with the 57th division on the right and the 11th division on their left, the Canadian troops upset the plan of the German commander, and struck into his flank along the Erclin stream, between the roads leading towards Valenciennes and Solesmes. While Sir A. W. Currie's men drove in the enemy's front, the divisions of Sir Charles Fergusson's 17th corps. Sir J. A. L. Haldane's 6th corps, and Sir G. M. Harper's 4th corps assailed the new German flank between Le Cateau and Solesmes road. The Guards division and the 24th division closed on Solesmes westward, along the road from Cambrai, and this important centre of communications, with its suburb of St. Python, was further encircled from the

south at Viesly. All the western bank of the Selle river below Viesly was reached in a resumption of the general offensive which began at dawn on October 10.

Le Cateau was then partly carried by the 66th and 25th divisions, who forced the enemy out of the city back to the railway embankments and Landrecies suburb. The enemy made a violent attempt to recover the town, but the rush of his infantry was checked, and the counter-attacking forces were thrown back to the railway. South of the town the American troops made an advance across the railway to St. Souplet and to the village of Vaux, above the large forest of Andigny protecting the secondary railway junction of Wassigny. The large tract of woodland was entered by the English troops forming the right wing of the 4th army, and the French forces connecting with them continued their advance up the Oise towards Guise.

Above Le Cateau the passage of the Selle river was forced. The Selle stream was only neck deep or chest deep in places, but it ran between steep banks. On the eastern side a strong front of German machine gunners was hidden in orchards, concealed positions, and half-finished trenches, with some eight feet of wire entanglement hastily erected.

In the night of October 11 East Yorkshires waded the stream, rushed a trench full of Germans, and made an advance to the railway ; but after trying to form a bridge-head they found their flanks were exposed and returned across the stream, having suffered much smaller losses than they had inflicted on the enemy. On Saturday morning, October 12, the Manchesters resolved to force the river. Carrying planks, and accompanied by sappers with light bridges, the troops went through a barrage of heavy gun fire. While the sappers stood in the water holding up their bridges, which were not quite long enough to reach the opposite bank, the Manchesters either went over in single file or forded the stream in their heavy kit.

There followed a fierce struggle with the bayonet in Neuvilly. Other English troops crossed the Selle to the north, where they had gained a footing on Friday night, and cleared the Germans out of their riverside positions. The New Zealanders stormed Briastre and fought up the heights of Bellevue, while the Guards advanced on their left on Solesmes and took some of the buildings on the outskirts. On the afternoon of October 13 a German counter-attack in force along the new river line was repulsed.

CHAPTER 15

Advance to Victory—(III)

THE advancing French armies were in optimistic mood. General Guillaumat, who was largely responsible for the decisive campaign against Bulgaria, had replaced General Berthelot in command of the French 5th army. The French 3rd army, under General Humbert, which had retired from the fighting line during the closing struggle for St. Quentin, and became again part of Marshal Foch's reserve army, prepared to appear in its old position alongside the French 1st army.

The explanation of these dispositions was that Foch was preparing his own battle, which was to be distinct from the operations conducted by the British, French, and American commanders-in-chief, but in support of them. The German commander also obtained more forces for the final battle by shortening his line round Reims. Stubbornly holding on to the Aisne river line by the promontory of Craonne, he swung back on either side of the highway from Reims to Rethel. This brought him along the lower course of the Suippe river, where he had four miles of dense pine woods covering the ground to the Retourne stream, a smaller tributary of the Aisne. Behind the Retourne was another eight miles of difficult country formed by the great bend of the upper Aisne at Château Porcien and Rethel. This upper Aisne line was the last of the Hindenburg works on the Champagne front, and it connected by the Hunding line with the Serre river defences above La Fère.

The Germans thus had a series of fortifications on which to fall back when they withdrew across the lower Suippe river. With their high-velocity guns they maintained a gas-shell bombardment upon the southern bank of the Suippe, in order to win time for another orderly withdrawal. The French 5th army forced the Suippe at its junction with the Aisne, crossing the Aisne-Marne canal, which had been the dividing-line between the opposing forces in the French offensive in the spring of 1917. The neighbouring armies involved in General von Einem's unexpected, sudden defeat were those of General von Mudra, General von

Eberhardt, and General von Carlowitz. The British victory at Le Cateau had a governing influence along the entire front of conflict. A rapid retreat was necessary.

To guard against any confusion, with weakening gaps along the front of five armies in hasty retreat and under hot pursuit, the timing of the various processes of withdrawal had to be carefully observed. The entire German armies in France and Flanders had lost, in 15 days, a total of 60,000 prisoners and 1,500 guns. But far greater losses in men and material were probable unless extreme care were taken.

The German line had been resolved into a series of gigantic salients, with the St. Gobain upland in the extreme angle. The army of General von Hutier had to travel by road to Guise, and thence to Hirson. The army of General von Carlowitz was happier in having direct railway communication from Laon, by Marle and Vervins to Hirson, and was able also to send reinforcements by rail towards Guise and the British line by Wassigny. General von Carlowitz further possessed railway communication with Rozoy and the Namur line at Mézières. So long as he retained an effective hold upon Laon, from which six railway lines radiated, he had many routes of retreat; but General von Eberhardt, who had been army corps commander with him in the Lys battle and received promotion to army command at the same time as he did, was in a desperate condition in regard to facilities for withdrawal. From his middle Aisne sector there was no line of retirement except one light railway in the centre by Sissonne, which ran within four miles of Rozoy and then swerved southward.

General von Mudra had a railway to Rethel, but he had to share this with the left divisions of General von Einem's army. Einem's forces on the right, having the remaining part of the Vouziers railway, and being covered by large tracks of pine wood, were expected by the high command to resist along the Arne and the Suippe while the forces of Mudra and Eberhardt conducted their operations of withdrawal. When, therefore, Einem's troops were compelled to retreat on October 10, three days before the earliest date fixed by the German high command, the movements of the other German armies were seriously disarranged. Mudra's men were fiercely pressed between the lower Suippe and the Aisne, where the French 5th army began another great advance, reaching some 24 miles north of Reims.

Even more severe was the pressure exerted upon the armies of Eberhardt and Carlowitz on the Craonne height, the Chemin des Dames, and the ground about the St. Gobain forest.

North of St. Gobain the wing of General Debeney's 1st army drove into Servais, between La Fère and the forested height, while all General Mangin's 10th army attacked from the south of St. Gobain to the California plateau, where the Italian divisions continued their assault on difficult hill positions. Here the forces of Eberhardt held on to the middle course of the Aisne, directly above Fismes, protecting and being protected by the promontory of Craonne. They were attacked on October 10 at Vendresse, Troyon, and Cerny, places at which Sir Douglas Haig with two divisions forced the Aisne in September, 1914, and reached the Chemin des Dames.

The Franco-Italian attack, however, was made in circumstances happier than those following the first battle of the Marne. It was delivered against the Germans' flank, instead of upon their front, and only as they weakened on the ridge and spurs did the left wing of the French 5th army strike along the low land by the river. Day and night the last struggle for the most famous ridge in France went on under strangely paradoxical conditions. The Germans wanted to retire; the French and Italians strove to make them stand their ground, and provoked counter-attacks towards Anizy, Laon, Ailles, and Craonne.

There was high hope that if the large German forces could be kept in action on the semicircle of heights south of Laon they could be enveloped by the French 5th and 1st armies. Once more, however, General von Böhn managed a hasty retirement with skill. With the men and guns which he withdrew he continually strengthened the forces standing along the Oise river, so that the line there held for more than a week, by Guise, Ribemont, and the western forts of La Fère. He also found troops and artillery to pour above Guise into the forest of Andigny and along the Sambre canal, while meeting the gallant French attempts to break over the Oise by Origny. This he achieved by sacrificing his stocks of war material round Laon. Carlowitz and Eberhardt retired before Mangin in the night of October 11, when the Chemin des Dames was evacuated; but German rearguards were still holding out at Tergnier, directly south of St. Quentin. On October 12 Tergnier was at last recovered, after being outflanked for some days, and La Fère, in spite of its

marshland defences, was turned from the south by a movement through St. Gobain. At the same time the hill forest, with its tangle of fortifications, was encircled by the northern wing and centre of the French 10th army, marching on Laon down the Ardon valley, while the southern wing spread above Craonne over the Croix heights.

There was a gap of weakness in the retiring lines of the Germans. The army of Mudra, upset on its right by the premature withdrawal of Einem's forces, and disarranged on its left by the sudden retreat of Eberhardt from the Aisne plateau and the upper part of the Laon-Reims railway, gave an opportunity to General Guillaumat and his 5th army. On October 12 the French troops fought across the Aisne at Neufchatel and, farther up the river, stormed into Asfeld and neighbouring villages. Above the Aisne the railway was cut at Amifontaine, and a rapid advance made to Sissonne camp, the marshes of Marchais, Le Thour, and Nizy-le-Comte. Thousands of French people were liberated, and for a time it looked as though a decisive movement would be effected. But General Guillaumat's army was arrested by the Hunding line, just above Sissonne and the marshes. The German commander succeeded in shortening his front and releasing divisions for the general reserve without any local disaster.

On the same day, October 12, General Mangin made a rapid advance, also without overtaking the Germans. In 36 hours he advanced more than 11 miles, taking his guns with him across the Ailette stream and up the Ardon, and arriving at nightfall by the outskirts of Laon. The city was entered the next morning, and happily found to be intact, with its magnificent cathedral crowning the hill. The Germans had not had time to fire much of the stores they left, or to mine roads sufficiently to impede the progress of General Mangin's supply columns. They took with them as hostages the mayor of Laon and some 500 male citizens. There was a stretch of some 10 miles of devastated ground between Soissons and Laon; but the French army worked forward quickly, capturing not only a great amount of the Germans' shell supply, but miles of their light-railway system.

From July 15 to October 13 the Germans had lost by capture 4,500 guns, and by destruction at least 5,000 more. Their artillery units had to be reduced through lack of material, with the result that their general strength was doubly decayed, their weakness in artillery increasing the dispiritedness of their

infantry. General Mangin pressed the Germans from all the heights south of Laon, and with the wing of General Debeney's army and with General Guillaumat's forces established a line running below the Serre river, the Souche stream, and along the Hunding line to the bend of the upper Aisne by Château Porcien. For some days the Germans kept strong rearguards posted two or three miles in front of their Hindenburg system of defence. As soon as the pursuers brought their heavy artillery forward, with ample shell supplies, the covering German forces fell back to the entrenched lines, where were concreted machine gun positions and belts of wire. The rivers, flooded canals, and marshes between Guise and Rethel were the greatest obstacles to a continuation of the French pursuit.

German sappers had chosen the line of water defences at the time when the primitive heavy British tank was shaking the German infantry around Bapaume, in the latter part of 1916. Under the deluges of September the river valleys had become inundated, and the Germans had done all they could to collect as much water as possible. The rainfall in October, however, was little more than one-fourth that of the month before, and it became possible, when the light tank brigades were organized within attacking distance of the moated Hindenburg works, to repeat the tactics employed along the Scheldt canal.

The German high command, meantime, was building up a large general reserve which appeared to vary from 30 to 40 divisions. General von Lossberg did not succeed Ludendorff, but went to Lorraine as chief of staff to the duke of Württemberg. His task was to withstand the attack by the special army which Foch was building up out of French troops withdrawn both from the shortening front and from sectors taken over by the American 2nd army. Some 20 French divisions with six United States divisions were obtained for the stroke through Lorraine, and for this General von Lossberg had to make demands upon the German divisions in reserve.

These forces were still strong in numbers, forming indeed half the entire German effectives, but they were growing demoralized, and badly needed relief by fresh divisions, and a lost rest. Only by an orderly withdrawal to the Meuse and the eastern part of Belgium could the Germans obtain the additional 50 divisions required to counter the blow which Marshal Foch in person was preparing in Lorraine. The Germans would have to meet the

American 2nd army as well as the French army group under General de Castelnau, and the strain on the German commander's resources increased not only with every action but with every troopship which crossed the Atlantic.

While Sir Douglas Haig was driving deeper into the Germans' front along the Oise and Sambre canal, King Albert's forces completed, on October 19, 1918, the recovery of western Flanders. Bruges was still held by the Germans on October 18, when a British officer and some Belgian officers endeavoured to penetrate into the town and were met by machine gun fire. The exodus had then, however, been going on for two days, and the artillery behind the Belgian lancers and infantry shelled the retreating columns winding down the road to Aeltre and Ghent. Plant worth £1,000,000 in the Brugeois works, a wagon-making establishment that the Germans had transformed into a munition factory, was destroyed. However, the belfry and other famous buildings were undamaged, and when the relieving troops entered the city the works of art were safe.

The Dutch frontier was reached without any opposition. The German guard marched away in the moonlight at three a.m. At Knocke and elsewhere large ammunition dumps were fired, but most of the heavy artillery was not removed, and fell, more or less damaged, into the hands of the Belgians. More than 12,000 prisoners were taken in roughly equal proportions by the Belgian, French and British forces between October 14 and October 19, and the guns captured numbered more than 550. When the Netherlands frontier was reached at Eede, the Germans fell back across the Schipdonck canal, which connected with the Lys river and covered Eecloo and Ghent. With rear-guards and machine-gunners they tried to delay the advanced Belgian forces on the low hills in front of the canal, but the pursuers worked directly along the Ghent canal and the highway by Aeltre, turning the positions on the rising ground, where the Germans were forced to abandon a great supply train in the haste of retreat. General Degoutte's army, which had been checked by the hostile force at Thielt, did not get out of step with its Allies by waiting for its guns to come forward and for its cavalry to move against the German flank.

The Germans had wired the country very deeply during the 1917 campaign, and had then also extended their concreted fortifications to Audenarde and Renaix, some 45 miles from the

coast. But the strength of the wire round the rising ground and railway junction of Thielt, from which five lines branched, tempted the Germans to stay a little too long. On October 19 the French utterly crushed all resistance and made a rapid advance to the Lys river, where they came in line with the British and Belgian forces above Courtrai. There was, however, a great technical difficulty in the Belgian and French movement in western Flanders. The two Allied armies, having occupied all the land up to the Dutch frontier, had to make a general change of direction and wheel into a new front of attack eastward. The northern movement between Roulers and the coast was finished, and its success strained the old system of communications of the Flanders group of armies.

Sir Herbert Plumer was the most fortunate of the three commanders in respect to supplies, as he was able to move in a south-easterly direction and help once more in the general British offensive, receiving food and munitions by the old routes running through Ypres and Lille. The British railway construction troops designed to extend their track to Mons, and by rapidly bridging the Lys and lightening the traffic on the new roads which were also flung across the river and through the old wilderness of battle they maintained the British strength in action. A week of rain made both work and movement arduous, but the British steadily advanced. The Belgian and French forces, however, could not continue to put forth their strength merely by continuing to work on their old communications. Having entirely changed their direction from the north to the east, after an advance of some 32 miles on a front of nearly 38 miles, the northernmost armies had to create new and direct lines of supply running to the Flemish coast. Here it was that the destruction wrought by the Germans in the harbours, docks, canals, and railways told heavily against the Allies.

On the whole the Germans took only legitimate military measures in this sector of their retreat. The capture of a series of undamaged cities filled with large populations added to the difficulties of supply. The advancing forces, while suffering from broken communications in the newly-recovered territory, had to feed hundreds of thousands of hungry civilians, as well as bring up their own supplies, haul their heavy artillery forward, repair old roads and make new corduroy tracks for their lorries, carts, tanks and other vehicles.

The Belgian army and General Degoutte's forces found that they could not get forward in strength for a resumption of their general offensive until they were based upon the Flemish coast. The swamp along the old Yser line could not be embanked and bridged quickly enough. Moreover, extensions of these roads and lines would only give lateral communications to the new front, and if the Germans succeeded in getting enough rested divisions into reserve for a counter-movement, the weak communications of the western Flanders front might provoke them to strike there. Brussels was still far off. The distance was not great, but the work required to arrive there was very arduous. This was the reason why the Belgian army was compelled to remain inactive while the British movement continued. King Albert desired to recover his kingdom undamaged as far as possible, and naturally refrained from assailing Ghent. As the Germans had used a very considerable number of concealed mines with delayed action in and round the Flemish seaports, some time passed before regular communication could be established between the armies and the coast.

The immediate, practical result was that von Armin effected his withdrawal in a successful manner, considering the heavy losses in men and material which he had incurred between the end of September and the middle of October. His line was shortened by the abolition of the wide angle from Knocke and Lombartzyde to Dixmude and Menin. With the Terneuzen canal and the Dender river lines as steps in a fighting retreat on Antwerp, he was able to make the German 4th army and the German marine corps a strong pivot on which the rest of the front, between the Scheldt and the Meuse, could turn.

The German lines by the Lys, Scheldt and Dender were, however, lessened in value by the British advance southward. They were, in fact, being turned by Sir Douglas Haig in his thrust towards Maubeuge, so that the Germans, while lingering in north-western Belgium, were once more exposed to a flanking movement. The French army under Degoutte began to turn von Armin's line immediately after the action at Thielt. In a fight for bridge-heads the French cavalry forced the passage of the inundated Lys at two places below Deynze, and advanced on a front of two and a half miles towards the south-east approach to Ghent, taking 1,100 prisoners. With more hard

fighting the French reached the railway junction of Waereghem, and extended by the hills in front of Audenarde.

At Courtrai the advance of the British 2nd army had ended for a time in the British troops occupying part of the town, being divided by the canalized Lys from the market square and the main buildings which the Germans held. All along the new German water-line, trench mortar barrages were used in defence in addition to the ordinary machine gun protection. Aerial torpedoes and small mortar bombs were employed as a means of breaking up small attacking forces collected for bridge-head operations. The device was undoubtedly effective in checking pursuit across the canal by skirmishing bodies of infantry without strong artillery support.

Especially where the trench mortar forces worked by the waterside, and pitched their heavy projectiles into buildings which the British infantrymen were using as secure cover against machine gun fire, the German defence was hard to counter. Courtrai had to be freed by a battle on the hills southward and across the flat country through which the British 5th army was fighting towards Tournai. By October 19 the wing of Quast's army was so outflanked on the south and pressed on the north that Courtrai was evacuated without a serious struggle. It was the Lancashire and Yorkshire troops who cleared Roubaix, and pushed on through Estaimpuis and reached the Scheldt, some two and a half miles from Tournai.

The evacuation of the Belgian towns and the arrival of the Allied troops were greeted joyfully by the Belgian inhabitants. But this was often short-lived, for the Germans, in retreat, recovered sufficiently to submit these places to heavy shelling, which caused many civilian casualties.

Above Le Cateau, where the Selle river ran by Solesmes into the Scheldt below Valenciennes, the British line had scarcely moved since the 3rd army arrived there on October 10, after the battle of Le Cateau. There had been fierce fighting at the bridge-head villages, such as St. Python and Haussy, but the Germans, with their trench mortar barrage, machine gun fire, and curtains of shell from the high-velocity guns, maintained their hold on the river-line and went on strengthening their positions for a week. The ground occupied by Sir Julian Byng's and Sir Henry Horne's armies was shelled with gas by German gunners from positions round the outskirts of the forest

of Mormal which could not be reached by the shorter-ranged British artillery. Moreover, the parks of British heavy artillery could only be brought forward slowly, as roads and tracks were made from the old Hindenburg line to the new positions along the tributary of the Scheldt. As has been shown, the British 4th army, under Sir Henry Rawlinson, was the first to get its guns and supply columns well over the Scheldt canal for a renewal of the offensive on October 17, when, in a struggle lasting three days, the Germans were driven across the Sambre and Oise canals in the sector below Le Cateau.

While this battle was proceeding the British 3rd army remained along the lower Selle with the left wing of the British 1st army, while the rest of Sir Henry Horne's divisions advanced from Douai towards Valenciennes, to get in line with the sweeping eastern movement of the 5th and 2nd armies through Lille, Roubaix, Tourcoing and Courtrai. The victories of the northern and southern British armies had created a great German salient in front of Tournai some 40 miles wide and 30 miles deep. This salient was rapidly evacuated by the Germans between October 16 and October 19, when General Plumer was pressing on its northern corner at Pecq, on the Scheldt above Tournai, and General Horne was continually thrusting into its southern corner by Denain, where the Selle stream flowed into the larger river. During this operation there was no opportunity of enveloping the German forces in the great salient, as the advanced positions of General Plumer and General Horne were not strong enough for the purpose. They were used only to threaten the Germans and quicken their withdrawal from the great French industrial region.

In the southern operations there was a fine achievement by the 8th division, which, after having been in line continually for a long period, broke into Douai and then on a wide front pursued the enemy along the Scarpe river towards St. Amand, forcing him to give ground so hastily that all his operations of withdrawal had to be quickened. He lacked the time to mine thoroughly the traffic routes which he abandoned.

The Canadian corps changed direction after its success at Cambrai and turned north-eastward towards Denain, the lower base of the new German salient. In the space of a week the Dominion forces drove into the Germans' territory to a depth of 23 miles, recovering 28 towns and villages, and liberating

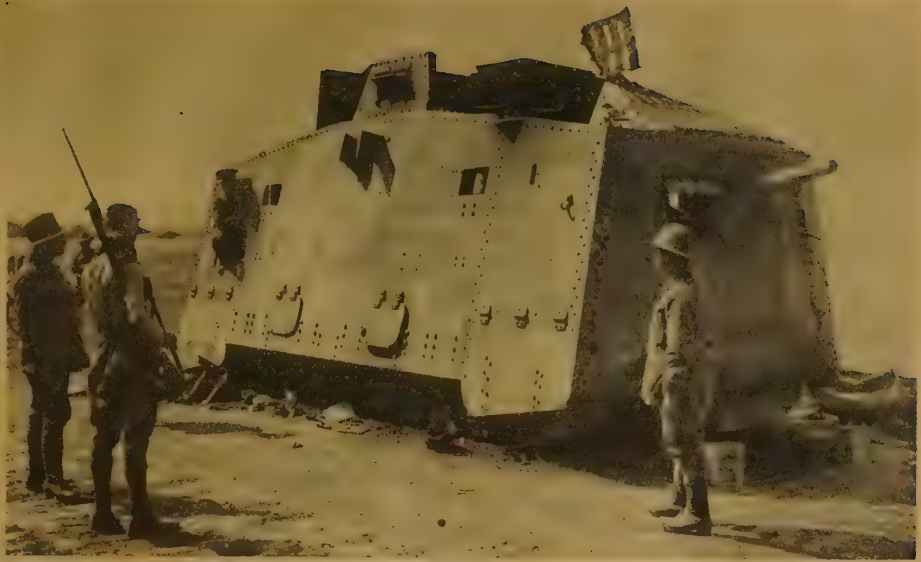
great numbers of French civilians. Denain was reached on the heels of the retreating Germans on October 19, and its capture was completed the following day in circumstances of considerable difficulty. The Canadians fought the Germans from street to street, in the Grand' Place and round St. Martin's Church, with the civilian population frequently in the line of battle.

The Canadian corps found itself faced with the hardest problem in commissariat after the victory in Denain market-place ; 20,000 French people were rescued in the town, bringing the number of children, women and old men attached to the command of Sir Arthur Currie to the extraordinary number of 73,000. All required food, comfort, shelter and transport, which had to be provided during one of the most important and intricate manœuvres of the war. A department was established for looking after the women and children. The sick were sorted out and attended to, and new homes were found for those who were too near the German guns.

The ground which the Canadians covered was classic in British military history. Over it the duke of Marlborough had fought his last campaign with Marshal Villars, through the dammed and inundated streams of the Sensée and the Scarpe to the Scheldt, which for 18 months had been obstacles to the 1st army's advance. Denain was the scene of one of Villars' successes after Marlborough had retired from his command.

The Germans were unable to continue shelling the town, as the Highland Territorials of the 51st division were in action alongside the Canadian troops, and the pace of the action in the southern corner of the salient had quickened. The Scotsmen stormed into Thiant, a village below Valenciennes, and had a fierce struggle with Germans shooting from the houses, while the villagers sheltered in the cellars. The German commander could not let his flank be driven in at Thiant, and sent strong reinforcements, who succeeded in pressing the Scotsmen partly out of the place, but the Highlanders then renewed the attack, clearing all the village and releasing the people.

While the struggle was going on in and around Denain there was another fierce conflict in the northern corner of the Tournai salient. Sir Herbert Plumer's divisions combined above and below Courtrai in a sweeping advance down to the Scheldt. The British 2nd army was then practically detached from King Albert's group of forces, and once more employed as

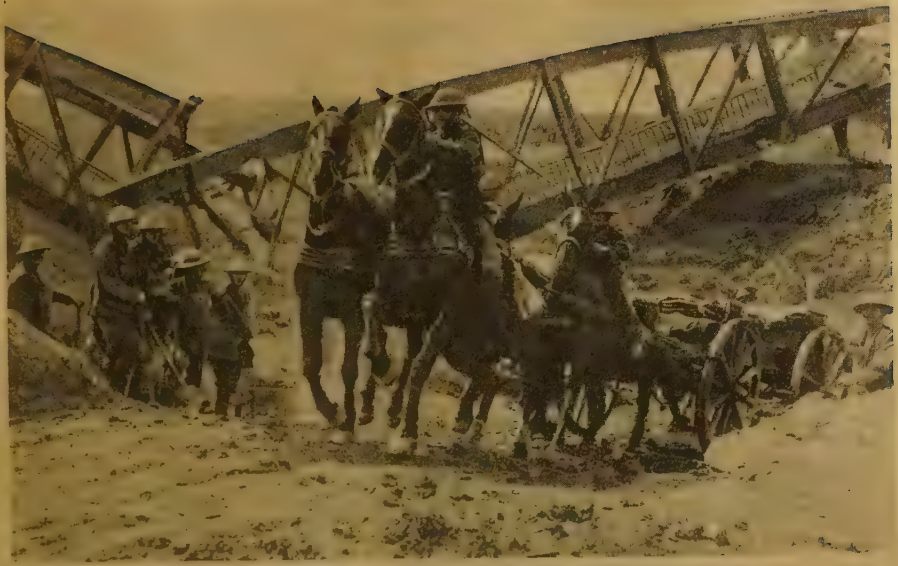


Australian Corps

GERMAN ACKNOWLEDGEMENT OF THE TANK'S UTILITY. For use against British tanks of thicker armour the Germans devised the specially heavy rifle ·530 calibre (see Plate 23), but it was too cumbrous to be of much use. Accordingly, the Germans introduced tanks of their own as the only possible counterstroke. This one was taken by Australians near Vaux on August 4, 1918.

GRAND' PLACE OF ST. QUENTIN AS LEFT BY THE GERMANS IN THEIR RETREAT, 1918

BRITISH INFANTRY ADVANCING ON CAMBRAI, IN THE VICTORY OFFENSIVE, OCTOBER, 1918



BRITISH GUNS ADVANCING ALONG THE SHELL-SMASHED CANAL DU NORD

one of the spear-heads of Sir Douglas Haig's operations. The Yorkshiremen and Lancashiremen, who had carried Roubaix and fought down to the Scheldt near Tournai, opened another line of attack against the Germans between the two towns. The Kents, Surreys, and other English battalions advanced along the road to Courtrai, while the division which had carried Harlebeke fought across the Lys and along the Bossuyt canal which entered the Scheldt at the village of that name.

The Germans were very strongly placed between the two rivers. Their infantry was dug in along the canal and the neighbouring railway embankment and protected by barbed wire, with both field guns and heavy guns in immediate support. The main German artillery poured a flanking fire against the northern British wing from the hills in front of Audenarde, sent out a frontal barrage from the heights round Renaix, and directed another cross-fire southwards from the hills dominating Tournai. In spite, however, of the Germans' shell fire, the gunners of the British 2nd army were well forward, and the result was one of the most spectacular battles of the campaign. The guns on both sides came into action at close range, shelling each other without cover from either bank of the Bossuyt canal. It was a supreme test of nerve, marksmanship and speedy firing, and the British artillery completely won. As the gunners beat down the German pieces the British infantry charged, breaking through the German line, reaching the German guns with the bayonet and capturing a score of field pieces and howitzers, with one of the naval guns which had been bombarding Courtrai and two undamaged trains loaded with material.

The attacking troops then worked down both banks of the canal to the river, and extended over the northern hills to the Audenarde railway at Vichte ; thus preparing the way for a French movement alongside them against the Germans' last line of concrete fortifications between Audenarde and Renaix, constructed to cover a turning movement round Ghent and prevent a direct thrust towards Brussels. Meanwhile, the ground above Tournai was the next objective of General Plumer's divisions, but they could not at once resume operations. Their power of manœuvring was for the time ended. In three weeks they had advanced, often by roundabout ways, through 40 miles of the worst ground on the western front, breaking the Germans and turning them whenever they tried to stand. They

had, however, to pause by the Scheldt, as did the forces of the 5th army who came alongside them, directly in front of Tournai, with some stiff fighting at Froyennes and St. Maur.

Round Tournai the German positions were very strong. Immediately north of the city St. Aubert hill overlooked the new British lines, and miles of undulating ground stretched eastward, giving the Germans cover from direct fire and screened gun positions. The German commander's losses were compensated by the shortening of his line, as he had excellent communications, while General Plumer and General Birdwood were in a country of ruined railways and damaged roads. The impetus of the northern offensive was temporarily spent by October 20. Forty miles from the old British bases, over stretches of mud and swamp, there had to be moved aerodromes and hospitals, water supply, store places, telegraphs and transport, and all the rest of the machinery required in modern warfare.

But Sir Douglas Haig's main forces of the 4th, 3rd and 1st armies had been gathering power for another advance during the week of operations against the Germans' left wing. As already related, the traffic lines from Péronne were so quickly extended that the British commander-in-chief was able to resume his general pursuit on October 17, with an advance by the 4th army to the Oise and Sambre canal. As this movement slowed down, in the night of October 19, to allow the heavy guns and supply columns to catch up with the infantry and field artillery, the 3rd army came into action from its new base round Cambrai.

The 19th division marched from Sir William Birdwood's command at Lille down to the 3rd army on the Selle river. The 4th division, belonging to the 1st army, was also engaged in Sir Julian Byng's attack, in which the Guards, the 62nd, 42nd, 5th, 17th and 38th divisions were concerned. Many of these forces had been fighting along the Selle river for a week, reaching some of the eastern villages, only to fall back against artillery and infantry counter-attacks. The chief difficulty was to make and maintain bridges across the stream with the Germans above the water pitching trench mortar bombs over in a barrage, as well as sweeping the ground with heavy shell fire and machine gun bursts. Owing to the rainy weather it was impossible for aerial observers to locate the hostile batteries; and although the British staff had devices for discovering German gun positions by microphone measurements of sounds of firing

and shell noises, these were useless against batteries reserving their fire until a great battle.

Sir Julian Byng met the circumstances by opening the Selle river action at 2 a.m., when rain was falling. The rain was heavy and continuous, and greatly impeded the infantry and tank forces, but it helped to screen the storming rushes of the leading infantry. From the neighbourhood of Denain to the vicinity of Le Cateau the British troops advanced in darkness and rain across the valley where General Smith-Dorrien's line had run early in the war. The Germans, while preparing to retire from Cambrai, had begun to construct deep, wired and hidden earthworks, from which they could command the stream and its approaches. These works had been completed after the first skirmishes along the riverside. With guns of every calibre the Germans curtained all the western bank to a considerable depth and swept the roads, so that it was largely a matter of luck if the first forces of assault found their bridges intact and themselves survived the shells and bullets poured upon them. Their own batteries, having few targets for counter-battery work, could only drench with gas all likely German gun positions, while making as dense a travelling barrage as possible. Under this barrage the British troops forced the Selle at Haspres, St. Python, Solesmes, Neuvilly and Amerval.

As soon as the river-line was secured there came the operation on the success of which everything in Sir Douglas Haig's scheme depended. The troops of the 3rd army had forced the river on many occasions in many places since reaching it on October 10, but they had been unable to throw strong bridges over the water by which guns and tanks could follow immediately in support. When the artillery and tanks were ready to advance, the task of getting them over the water had become ten times more difficult. Yet the bridge-building was accomplished, in the rain and gloom of October 20, under heavy fire from both artillery and machine guns. One field company of the 38th (Welsh) division lost half of its effectives, but completed its bridge with such steady skill that Sir Douglas Haig singled out the feat as one of the finest instances of pluck and determination in the campaign. It was indeed a sappers' battle. The infantry did all that men could do, working indefatigably along the roads and railways towards Landrecies and Le Quesnoy, but without the bridge work of the engineers the attack would have been held.

After a long struggle in St. Python and Solesmes the German front-line troops were forced to retire ; but they made a determined counter-attack from the direction of Le Quesnoy. By this time the British guns had been brought across the river, and in front of them were some of the light tanks. At short range the Germans were again engaged, the counter-attack was shattered, and, in a fierce battle lasting for 24 hours, Amerval was retained, and the hills above the tributary of the Ecaillon won, with some 3,000 prisoners and a number of guns. Like the advance of the 4th army, which immediately preceded it, the forward sweep of the 3rd army led to one of the hardest fought actions of the campaign.

In both resoluteness of spirit and military discipline the German forces seemed to have recovered from the Le Cateau disaster. Their resistance gave some colour to the French view that they would be able to stand until the winter, and conduct their retirement to the Meuse in fighting order, in time for their last reinforcement of 500,000 young recruits and recovered light casualties to take part in the final struggle. General Debeney, whose 1st army had for a long period been acting close alongside General Rawlinson's 4th army, found that the inundated valley of the Oise by Guise prevented him from working forward. His bridge-head at Mont d'Origny was not capable of being developed into a route of advance.

The French held on to the height against continual counter-attacks, but it was impossible for them to advance. The fact was that the Germans were not relying wholly on their Serre-Hunding works southward. They had constructed a new inner system, the Hermann line, extending from the neighbourhood of Origny to the hills above Marle. General Debeney decided that it would be better to transfer his point of attack to the Hermann line, and on October 19, 1918, General Pétain came to take direction of a combined attack by the forces of General Debeney, General Mangin and General Guillaumat upon the Guise plateau and the Germans' communications at Hirson. It was at Hirson that Sir Douglas Haig was aiming in his thrust towards the Aulnoye and Maubeuge railway junctions ; so there were six Allied armies moving against the German centre.

Yet again the determined character of the Germans' resistance and the sustained violence of their counter-attacks appeared to make an early end of the war very uncertain. From the

Oise by Ribemont to the Aisne by Asfeld the French 1st, 10th and 5th armies could only win forward by slow degrees. Every step they made through the lines of caverns, concrete works and entanglements provoked counter-attacks in strength by the Germans. Debeney's main forces, secretly moved southward, drove between the Oise and Serre rivers on the left rear of the Hunding line, which General Mangin attacked in front, while General Guillaumat assailed it for 15 miles on the right.

General von Hutier acknowledged the skill with which the French 1st army had suddenly been manœuvred by withdrawing from the angle of the Oise and Serre and massing along the Hermann line; while Eberhardt counter-attacked Mangin by the Laon railway, also in the design of freeing himself for a short retirement. Mudra likewise counter-attacked strenuously, and in the upper Argonne hills, where a Czecho-Slovak contingent was fighting under General Gouraud, a strong German force was employed to recover the heights above Vouziers. The American 1st army was also countered on the ridge above Grandpré and in the woods by Bantheville.

The decision turned largely upon the question of morale. Both sides were drenched, cold and miserable, with the prospect of a bitter winter struggle against epidemic sickness as well as the casualties of war. The Allied soldiers had the disadvantage of drawing little hope from the armistice proposals, as they did not believe that the Germans intended to surrender. The British staff, however, knew that the masses of Germans opposed to them had lost heart. The resistance offered along the Selle river had definitely exhausted the fresh forces obtained by the withdrawals between Douai and the Flemish coast. All that was needed was to maintain the utmost pressure upon the Germans collected between the forests of Mormal and Condé, until they again lost faith and continued their retreat.

As General Debeney had moved his main forces of attack from the Sambre and Oise canal, Sir Henry Rawlinson did not continue his offensive above Guise, but swung on the left by Bazeul so as to make a side thrust between Le Cateau and Landrecies, while Sir Julian Byng and Sir Henry Horné resumed their attack over the Selle river line. The 1st, 6th, 26th and 18th divisions of the 4th army were deployed on the night of October 22 alongside the 33rd, 21st, 5th, 42nd, 37th, the New Zealand division, and the 3rd, 2nd and 19th divisions. On the left were the 61st

division, the 4th division and 51st division, mainly of 1st army troops, ready to exploit the advantages gained by the 3rd army.

In spite of the screen of bad weather the German staff endeavoured to bring the pursuit to a standstill. At midnight on October 22 the Germans began a violent bombardment of the British assembly places, inflicting considerable losses on one British division and injuring men in other units. Nearly everything was in favour of the German defence. The weather continued bad, allowing them to escape again from counter-battery work, and the ground which they occupied between the Scheldt and the Sambre was as though marked out by nature for an obstinate defence. It was crossed by a succession of tributary streams, and continuing farther north with wider, deeper watercourses—first the Selle, then the Ecaillon, with a number of branching brooks, and the Harpies and the Rhonelle.

Between these rivers rose the foothills of the Ardennes, many of which were covered by the outpost copses of the great forest of Mormal. All the slopes were entrenched, and many wired and excavated, for the Germans had worked with tremendous energy after their defeat at Le Cateau. The Mormal woodland was the last hope of the German staff. If the course of battle could be kept in the forest sector there would follow a long struggle like that in the Argonne. Sir Douglas Haig wanted room to swing round the forest, and before the Germans could recover from the defeats of October 19 and October 20 the British commander launched against them 150,000 troops.

The action opened in a fog at night, with a difference in timing the two parts of the operations similar to that successfully adopted in the battle of Le Cateau. The 4th army started its bombardment and infantry movements at 1.20 a.m. on October 23. Then at 3 a.m., when the German commander was marching his last reserves from the cover of the Mormal forest towards the Landrecies sector, the 3rd army, which the Germans thought to be temporarily exhausted in the struggle along the Selle river, also attacked as far north as the hills above Haussy, prolonging the line of battle to a total length of 15 miles. In front of Catillon and the hills above it the 1st and 6th divisions won ground all along the waterway preparatory to an action for forcing the passage. On their right some of the forces of the French 1st army demonstrated with very heavy gun fire and skirmishing infantry movements along the

approaches to Guise, with a view to assisting the British offensive and also veiling the transfer of force against the Hermann line. All this movement for holding the enemy troops along the canal, where they were not menaced, was so successful that the Germans claimed a victorious defence there.

Meanwhile, the 25th division of English county troops broke through the German flank by Pommereuil and stormed into the large maze of Bishop's Wood, stretching midway between Le Cateau and Landrecies. Here the fighting was swift and violent. When the German commander recovered from the distracting demonstration along the Sambre and Oise canal, he brought forces into Landrecies and sent them into the eastern end of the wood and down the road to Bousies village above the forest combat. Throughout all the afternoon and far into the night the 25th division continued to wrestle for Bishop's Wood, being greatly helped by an advance made on their left flank by the Surreys, eastern county troops and other battalions of the 18th division. This northernmost force of Sir Henry Rawlinson's army worked quickly forward over four miles of hills and valleys before reaching Bousies village. Then, in fierce street fighting, they broke the German supporting force, and, holding on to the houses against all counter-attacks, completely covered the principal operations in Bishop's Wood.

All the way there was stiff fighting. Only the spirit of the attackers enabled them to outlast and wear down the divisions of the defence. But the rapid, unexpected turning movement behind Le Cateau, together with the appearance of whippet tanks five miles beyond the Selle river, helped to demoralize the Germans. Only a few stood to defend Bousies. British aerial observers reported that the road running along the edge of Mormal forest was crowded with fugitives. A strong, fresh German force had been collected in the forest for the purpose of preventing a break-through. As it came forward, according to plan, to assail the English advance guard, the retiring German troops mingled with it in such numbers that they could not be re-formed. They checked the great counter-attack and communicated some of their panic feeling in regard to the British tanks to the new force, thus causing more confusion. Some four divisions were overthrown round Mormal forest, and when in the latter part of the morning the fog lifted, British aeroplanes were able to direct gun fire more effectively.

The light tanks also played an important part in the capture of Beaurain village, where Kent, Devon and Cornish men of the 5th division were engaged. The New Zealanders, assembling by Solesmes, pressed forward quickly through Vertain, found the bridges over the neighbouring brook blown up, and waded across under machine gun and shell fire, with few casualties. They reached their objectives in such strength and spirit that they formed for another attack in the evening, won bridge-head after bridge-head along the Ecaillon river and advanced from Beaudignies over the hills within rifle range of Le Quesnoy.

The Home County and Highland troops of the 33rd division, with the Northumberlands, Yorks and other battalions of the 21st division, advanced south of Solesmes to Vendegies Wood, but could not carry the village. Amid the houses fighting went on fiercely until the close of the day, when the Germans made a counter-attack, strongly supported by artillery fire, and, after being repulsed, renewed the struggle and recovered the village.

Farther north the 3rd division, fighting alongside the 2nd division, took Escarmais, and there opened the way for a turning movement round Valenciennes by the 1st army. While the main battle was developing into a decisive action Sir Henry Horne further cleared the ground for his strong intervention in the struggle by turning and taking, with light Canadian skirmishers, the large forest of Raismes which covered the approaches to Condé.

The western suburbs of Valenciennes were reached at the mining centres of Anzin and Bruay, the Scheldt becoming, as at Cambrai, the temporary dividing line between the Canadian corps with its British comrades, and the German forces. As at Cambrai, General Horne and General Byng combined in flanking thrusts above and below the city, while menacing the garrison on the outskirts. The Germans for a time retained bridge-heads on the western bank of the Scheldt, which they had fenced with a double line of entanglements, but they were merely occupied in the front, while the British advanced round the city.

After the night fighting on October 23 the battle increased in intensity and range between Valenciennes and Landrecies before break of day on October 24. The British armies were west of Catillon and Ors, by the Sambre and Oise canal, on the eastern edge of Bishop's Wood, in Bousies and Vendegies Wood, Saleches, Beaudignies and Verchain. Some 15 villages were

captured, three streams forced, two plateaux completely conquered and passed, and guns captured in hundreds. From all the positions named, the 4th, 3rd and 1st armies continued to storm forward with practically no pause on October 24. The Germans were becoming physically exhausted, as was shown by the weakness of their counter-attacks; nevertheless, they clung to many of their strong points with great courage. Only towards nightfall on the second day of the great battle was it clear that the strength of their reserves was exhausted.

Beaudignies, the New Zealand bridge-head, was the main starting-point for the renewal of the attack in the darkness of October 24. The New Zealanders went forward, with British troops on either side, and fought up the ridge leading to Le Quesnoy. When the German infantry broke, the German gunners bravely tried to cover the retreat, but they were unaccustomed to the speed of the New Zealand attack. As the crews were limbering up, the overseas troops rushed them and captured field guns and a heavy howitzer, all intact with ammunition. This stroke had a powerful effect upon the German commander. He withdrew all his other batteries from their positions south of the Valenciennes railway, with the result that the garrisons of positions on either side of Beaudignies were left without artillery support. Thereupon, the leading brigade of the 37th division made a rushing advance on Chissignies, a village one mile away on the valley road to Mormal forest. The men worked through severe machine gun fire when crossing the river, and then fought along barricaded streets. North of Beaudignies other British battalions pushed from the Ecaillon river and took Ruesnes village.

Northward, Thiant was definitely secured, and the 4th division took Verchain and Moncheaux, while the Highland Territorials cleared the river-bank to Maing. Vendegies, that much-contested point, was finally secured by envelopment in the afternoon, and found to be honeycombed with camouflaged works and wired and barricaded into one of the most remarkable of improvised strongholds. Only when the Germans were dropping from fatigue were they finally overcome and all the ground cleared for the closing operations of the war. The action along the Selle ended with the capture of some 20,000 prisoners and 475 guns. It decided the question of whether the war was likely to be prolonged until the spring of 1919.

It was the design of the German high command to withdraw on Antwerp, Brussels and Namur, hold the line of the Meuse to the end of the Ardennes forest, and connect with the Moselle at Thionville and Metz, while retaining the southern mountain line to Mulhouse. This plan had been formed by Ludendorff at the end of September, 1918, when he asked Prince Max of Baden to arrange an armistice; and he and his lieutenants steadily worked at plans for the great retirement during the following month. Guns were lost by the thousand and men captured by the ten thousand; but the movement of retreat was generally successful, with the exception of the operations in the sectors of the persistent British attack. Sir Douglas Haig continually moved forward in strength at a pace which interfered with the German plan of retirement.

The British thrust across the tributaries of the Scheldt had disconcerting consequences for the German forces under the command of the Prussian crown prince. Orders were issued to Hutier, commanding along the Oise line, that he must stand firm at any cost against Debeney in order to gain time for the withdrawal of all the forces depending upon the Maubeuge and Hirson lines of railway communication. Hutier repeated the command to all his commanders down to the commandants of battalions, and some of the last were captured on October 19 with copies of the order on them. Then it was that Marshal Foch sent General Pétain to the Serre-Hunding line to arrange a converging attack by the French 1st, 10th and 5th armies in the direction of Hirson. General Pétain's task was one of tremendous difficulty. His line of attack from the Oise to the Aisne formed a rough crescent some 40 miles in length, and his ultimate objective—the five railway tracks at Hirson junction—was about 25 miles distant from each of his three armies.

There was a double Hindenburg system to overcome, consisting of separated zones, each with five trenches and five wire-fields, with an abundance of the usual concrete works, flooded streams and anti-tank mine-fields. Behind the Hindenburg works was the wooded, broken, wet countryside of the region known as the Thierache, which by reason of the nature of its ground was a perfect field for machine gun and trench mortar defence. On their trench mortars the Germans continued to place great reliance. They were used in more abundance than machine guns had been at the beginning of the war, the

construction being changed so that, instead of firing at a high angle with howitzer effect, they were employed for direct, short-range shooting. These trench mortars saved many of the bridge-heads of the Scheldt and Oise from being quickly carried by the Allies, and also caused considerable damage to the tanks.

After the operations of the French 1st army, on October 19, Hutier obeyed the order given to him. With every man that could be thrown into battle he made a successful counter-attack along the Hermann line, between the Oise and Serre rivers. He recovered the high flanking position of Mont d'Origny and the dominating point of Villers-le-Sec, with the ground along the railway line to La Ferté. Along the Serre and Souche swamps the German commander retired from his bridge-head positions, allowing the French 10th army to advance a short distance ; but the ground by the streams was so flooded that Mangin was brought to a standstill.

Then it was that Pétain opened his main operations. On October 25, as the British offensive between Valenciennes and Landrecies came to a pause, to allow of the forward movement of guns and supplies, Generals Debeney, Mangin and Guillaumat made a combined attack, on a front of some 40 miles, between the Oise above Ribecourt and the Aisne below Château Porcien. Debeney first struck at Guise to draw Hutier's last reserves northward, and then assailed Villers-le-Sec and all its connected works covering a depth of nearly two miles. A number of tanks was employed, together with a heavy travelling barrage and long-distance fire upon all the Germans' railway centres between Guise and Montcornet. The German line was broken to a depth of some three miles ; but Hutier again succeeded in rallying his forces, and recovered most of the Hermann line from Mont d'Origny to the Ribemont and La Ferté railway.

This, however, was Hutier's last effort. Debeney attacked again in the night, and continued to press the Germans through-out October 26, striking them in the flank by the Origny posi-tion, as well as working gradually forward with tanks and infantry and intensive bombardments through the Hermann system. He recaptured the villages along the railway between the two rivers, and pushed through the breaches in the fortified line towards the tableland round Guise. In the evening of October 26 Hutier prepared to retreat, and the French 1st army, feeling the enemy give, redoubled its efforts, breaking in on the

flank across the flooded Oise valley and thrusting into the centre, capturing nearly 4,000 prisoners and some 20 guns. Hutier saved his artillery at heavy cost in men, and Debeney pressed onward to the high land about Guise, with an advancing front of some 20 miles, from the outskirts of the town on the Oise to Mesbrecourt, above the Serre. In the sweep of his right wing Debeney struck the forces of Eberhardt, on the Serre, compelling him to uncover the town of Crécy, into which Mangin's troops entered on October 27. On the same day Debeney's left wing, in an advance of some five miles, closed in on the town of Guise, fighting through the hospital barracks and sidings and branch lines of the railway.

The old castle of Guise proved, however, a serious obstacle, and for the twentieth time in its romantic history had to stand a siege. It was the kind of building that Richelieu or Cromwell could have taken with a few old-fashioned cannon, firing almost point-blank into the walls. The picturesque old building could not be so easily reached and stormed under modern conditions of defence. It stood on a cliff, above the looping waters of the Oise running through a deep, narrow gap in the Guise plateau. The large underground passages of the ruined fortress made it a magnificent machine gun position, especially when the Germans dug a new entrenchment round the place and registered their guns upon all the approaches.

With its cliffs towering 530 feet above the Oise, and extending in a series of ridges in the bend of the river, Guise was a place of great military importance. It was the gate to Hirson and the Meuse during the last campaign of the war, as it had been the gate to St. Quentin and Laon during the first campaign. It had been the decisive rallying-point of the French 5th army in August, 1914, and ranked with Le Cateau in British and French military history. There the Prussian 10th army corps and the Prussian Guard, while making a turning movement towards St. Quentin in pursuit of Sir Douglas Haig's two weary divisions, had been checked by the wing of the French 5th army rallying on the Guise plateau. The first battle of Guise had saved both Lanrezac's forces and Sir John French's troops.

The town had, therefore, become to the French soldier what Le Cateau was to the British soldier, and Debeney's forces fought their way into the trenches round the old castle with the same vehemence that the British displayed against the railway

embankment by the Selle river. Guise, however, could not be carried by even the most spirited of advanced forces, and after winning the entrenchment round the castle the French troops had to wait for their heavy artillery to cross the large stretch of recovered country between the two rivers and accumulate shell for another great barrage of assault.

While the French 1st army was making its advance, General Mangin's men increased the number of their bridge-heads across the Serre, where the Germans were shaken by the northward thrust, and also won a road of approach at the end of the Sissonne marshlands. The effect of these two movements of the 10th army was to threaten with envelopment the railway junction of Marle, where the lines from Maubeuge and Metz met. General Mangin, however, did not employ much force in his central operations along the river swamps, and only engaged and worried the enemy during the stronger movements on either side of Eberhardt's forces. It was upon the men of the French 5th army, under Guillaumat, that the hardest task fell. They had to assail the original Hunding line between Sissonne and Château Porcien, on a front of some 15 miles of hilly country furnished with every possible means of defence.

Hutier, holding the line south-east of Le Cateau to the Serre river, had 18 divisions in action and five more in immediate reserve. He was faced by the wing of the British 4th army, by all the forces under Debeney, and by some of the divisions of the French 10th army working across the Serre on to his flank. Eberhardt, commanding the German 7th army, had only 10 divisions in action between the Serre and the road to Montcornet junction, as a considerable part of his front was covered by the marshlands. On his left was the German 1st army, under Mudra, stretching along the Aisne to Rethel, and cooperating with more divisions to defend the threatened Hunding line.

When the French 5th army attacked on October 25, Eberhardt and Mudra combined in massing against the French forces. After an intensive artillery preparation directed against the new anti-tank defences of armoured concrete, as well as upon the caves and forts of the Hindenburg system, Guillaumat sent out his tanks and low-flying aeroplanes, and launched his veteran infantry in a desperate struggle against the wings of the fortified zone between the Sissonne marshes and the Aisne river. Then

the French commander struck the German centre where Eberhardt and Mudra's divisions connected. The first zone of works was overrun, but on the thickly-wooded hills covering the second Hindenburg line the Germans rallied, and, receiving strong reinforcements, made a great counter-attack and recovered a considerable stretch of the southern part of the Hunding line. In the centre, by the road to Montcornet, the French troops held strongly against the Germans' barrages and continuous counter-attacks, and in a fiercely contested battle reached St. Quentin-le-Petit and the hamlet of Recouvrance.

Again the German commanders poured in fresh divisions, and the battle continued all night and through October 26. The advanced French forces formed a blunt wedge on a front of four and a half miles and a depth of about two miles, between the Montcornet road and the tableland at St. Fergeux, below Château Porcien. The new salient was a difficult one to hold, as the Germans could sweep it completely with fire from three sides, even their trench mortar barrages being able almost to cover the lost portion of the Hunding defences. Yet the lot of the German counter-attacking troops was not easy, as the massed French guns commanded all the ground, and throughout October 26 were used against every hostile force. The French went forward, and by October 27 they had extended their gains along the road between Château Porcien and Banogne, and consolidated their conquest of the larger part of the first Hunding system, taking 2,500 prisoners. Fierce local bursts of trench warfare went on in the maze of the Hunding system until October 29, when the 5th army, having brought the guns forward, made another thrust across the 10 miles of front between the Montcornet road and the Aisne.

Again the Germans countered in great strength, Below appearing alongside Eberhardt and Mudra in the swaying battle. The French were again checked along the Montcornet road, but they broke the enemy on the hills by the Aisne and won a footing on the western slopes of the St. Fergeux upland, on the flank of the Germans' riverside fortress of Château Porcien. Here the struggle went on, day and night, until the end of the month. With admirable gallantry a French division stormed the heights above Château Porcien, fell back under the full weight of Mudra's forces, and once more advanced over the plateau, only to be compelled to retire to the shelter of the western slopes on

November 1. These attacks, which were supported by a thrust across the Aisne made by the French 4th army, were the most thankless operations in which an army could engage. No decisive result was expected by General Pétain and Marshal Foch when they ordered that the struggle in the Hunding line should be maintained with the utmost vigour.

The French 4th army, under General Gouraud, and the American 1st army, under General Hunter Liggett, were then completing their preparations for a combined offensive round the northern prolongation of the Argonne forest. It was necessary to keep the Germans at an extreme tension in their salient position on the upper Aisne river in order to weaken their reserve power between the Aisne and the Meuse. So the French 5th army, having failed to break through the Hunding line in the first period of its offensive, had to continue fighting amid its wrecked tanks, in hollows and river-courses flooded with poison gas, against an enemy sheltering on the hillsides and screened by innumerable patches of woodland.

On the whole, the converging operations of the French 1st, 10th and 5th armies during the last week in October, 1918, were not so successful as had been anticipated. Although the new Hermann line, begun in the middle of August, was pierced, the main old Hindenburg defences from Guise to Rethel were not broken through. The German commander held strongly to his second zone of works, and in places retained considerable fragments of his first zone. From the French standpoint the result confirmed the view of the skill and strength with which the German withdrawal was being effected that had led Marshal Foch to place his chief hope upon the army of Lorraine, under General de Castelnau. The German staff required the Hunding fence and the Guise gateway as a central pivot for wheeling slowly back from the British armies towards Namur. Although they were able to hold to their hinge on the Serre by Marle, this did not save them from the danger of being driven in confusion from the Ardennes forest before they could withdraw in strong order to the Meuse line.

Sir Douglas Haig immediately followed up the advantages won by his 4th and 3rd armies, in the struggle over the Selle and Ecaillon rivers, by an enveloping movement round Valenciennes. From October 25 to October 31 there was a continuous battle for Valenciennes and the approaches to Mons

behind it. The Canadian corps and the 22nd corps of the 1st army and the 17th corps of the 3rd army were employed in the struggle for the city, the 4th Canadian division, the 51st Highland division, the 61st division, the 49th division, and 4th British division being principally engaged in the action.

The Germans protected themselves by destroying the sluices of the Scheldt canal between Valenciennes and Tournai. Along this stretch of some 22 miles there was 15 miles of lake water. By Condé the valley was a lagoon, from three to four miles wide, and although the water in places came scarcely up to the knees of the wading infantry, it made the ground impossible for general movements. German snipers and machine-gunners occupied the buildings in the flood, and transformed them into little island forts and observation-posts. Only three German divisions were required along the lake-land by the Franco-Belgian frontier, and the German commander was able to concentrate six divisions on a four-mile strip of ground in the Rhonelle valley, south of Valenciennes.

This strip of ground was the only gate of attack against the city, and along it the battle of Valenciennes was fought. In an exploring skirmish on October 25 the Highland division took Maing, some four and a half miles below Valenciennes, while a cyclist patrol entered the village of Artres by the Rhonelle stream. The cyclists were driven back by strong forces, and the Highlanders, while engaged in close fighting with a German garrison in the manor-house of Maing, were attacked on October 26 by wave after wave of fresh German counter-attacking troops. The last wave of assault was met by the Argyll and Sutherland Highlanders, who counter-charged with the bayonet and advanced for two miles down the Valenciennes road to Famars village. About the same time the Artres bridge-head of the Rhonelle stream was stormed, and the passage of the river forced. The Germans retreated in confusion.

On the line of the next ridge between the Rhonelle and the old fortress town of Le Quesnoy a strong German reserve force, comprising some two divisions additional to the six divisions holding the gate to Valenciennes, stood steady, and, after their artillery had swept the river, the fresh troops charged from the ridge, and tried to turn the Artres bridge-head by breaking through on the left across the Le Quesnoy and Valenciennes railway. The counter-thrust was delivered in force, but was

repulsed. Meanwhile, the Argyll and Sutherlands and Gordons worked through Famars, and, when they had established themselves in the village and reached Mont Houy, close to the city, another German force made a night counter-attack on October 27, and won back the northern part of Famars.

From the southern streets the Gordon Highlanders advanced and, rushing machine guns and riflemen, recaptured the houses. Mont Houy, however, remained partly in the Germans' hands, as their machine-gunners on the wooded slopes were resolute and alert. The advantage won and retained on the high-road at Famars was extended in the morning of October 28 by an attack on the right against the village of Aulnoye. At this point Valenciennes was definitely outflanked, and as the Canadians were behind the city northward, having fought their way along the railway embankment to the outskirts of Condé at Fresnes, Valenciennes was encircled for three-quarters of its circuit.

Again the German commander counter-attacked with all the strength of his wasted eight divisions. He recovered Aulnoye and the fortressed height of Mont Houy, and pressed hard but vainly along the strip of ground between the Scheldt and the Rhonelle. Upon the failure of this last counter-attack the German commander began quickly to withdraw from the city, endeavouring to cover his movements by continuous machine gun fire along his endangered southern flank. The line of outposts could have been driven in by local operations in the course of a few days ; but Haig intervened, and directed General Horne and General Byng to carry Valenciennes at once by storm.

The immediate German plan was to retreat into the Mormal forest, but it was completely upset by a combined movement by King Albert and Sir Douglas Haig. On October 31 the Flanders group of armies broke over the Scheldt into Audenarde, while the Canadian and British corps of the 1st and 3rd armies began to complete their encircling operations round Valenciennes. Both Sir Henry Horne and Sir Julian Byng had massed considerable forces of artillery round the city. When, at dawn on November 1, the barrage of two British armies fell on the Germans' outpost line by the Scheldt, and across the Famars avenue, and along the ridge of the Rhonelle valley, the German commander had to answer force by force. He threw every available man into a rearguard action in order to save his own army from being broken and enveloped and to prevent an

outflanking movement against the other German forces fighting northward by Renaix and Audenarde.

The 4th division of Canadians carried Mont Houy under a smoke-screen and travelling curtain of shell fire, and advanced towards the southern part of the city. German gunners tried to stop them by a defensive barrage, but the British artillery fire was very heavy, and it beat down the hostile pieces. The Germans fought hard, but more than 2,000 of them surrendered. On the western side of the city a brigade of Canadians forced the passage of the canalized Scheldt.

The German commander did not attempt to counter-attack against the Canadians. Their barrage was too heavy, and their positions at the extreme corner of the battlefield were such that he might very easily have been entrapped. If he had massed there he would have been outflanked some miles eastward. Instead of a direct counter-attack, he struck on the British flank by the Rhonelle river, from which, if he had been successful, he could have turned the Canadian forces. From the heights just covering the road and railway to Bavai and Maubeuge, remnants of Below's armies, with reinforcements from Quast, advanced towards the riverside. There was little change in the Prussian tactics of infantry attack between Mons and Valenciennes in 1914 and between Valenciennes and Mons in 1918. The German commander returned to his old method of the assault en masse ; but the artillery odds were against him; and the British 61st, 49th and 4th divisions, with part of the Canadian 4th division at Aulnoye village, were at least equal in effectives to the six worn German divisions which engaged them.

Five German tanks were employed ; three were broken and captured and two retired from the field. Only at the village of Maresches did the attacking German troops survive the barrage of shell and bullets in sufficient force to break into the river-line ; and before night fell the English troops recovered all the ground and began to press over the Rhonelle, driving the Germans from the ridge, taking Préseau village in an advance of two miles, and taking some 5,000 prisoners. This was the decisive movement in the battle of Valenciennes, and although the city was formally taken by Canadian patrols on Saturday morning, November 2, it was in large measure the English divisions which broke the Germans' heavy counter-attacks and crushed their last attempt to hold the place.

Audenarde was liberated a day earlier than Valenciennes, in spite of the fact that the resumed offensive in Flanders began later than the encircling movement round the French frontier city. On October 31 the British 2nd army and the French army of General Degoutte, reinforced by an American contingent, opened a turning movement above Tournai, on a front of some 14 miles between the Lys river by Deynst and the Scheldt by Avelghem. The movement had a double design. On the north it threatened to turn the German defences in front of Ghent, where the German marine corps was still holding to the Schipdonck canal at Eecloo. On the south it threatened to turn the water defences of Tournai at the time when the Tournai garrison was also menaced by an outflanking advance by the British 1st and 3rd armies striking upward from Valenciennes. Sir Douglas Haig and King Albert assisted each other by their operations at the end of October, and imposed so violent a strain upon all the German line between the Dutch frontier and the northern outskirts of the forest of Mormal that the German high command could not provide a single fresh division for the closing battle of the war in Mormal forest, final preparations for which the British commander-in-chief was making while his 2nd, 1st and 3rd armies were fighting forward.

Owing mainly to the uninterrupted succession of victorious advances made by the British 4th and 3rd armies, Marshal Foch was at last in a position to punish the Germans for their long and obstinate stand along the Serre-Hunding line. Too long had the armies of Hutier, Eberhardt and Mudra delayed their withdrawal from the corner of the large salient between Rethel and Guise. Their forces were to be driven suddenly towards the Ardennes forest, there confusing and overcrowding the other German armies which Sir Douglas Haig was driving in the same direction. The new Flanders operation was calculated to loosen the Germans' hold upon the ground north of the road to Mons, so that all the British armies would be able to close around the Maubeuge-Cologne trunk railway and there prevent the central German forces from escaping from complete disaster.

On October 31 Sir Herbert Plumer's troops took only a secondary part in the attack, having already won a line well in advance of the other forces of the Flanders group. Their immediate work consisted in clearing a triangle of rising ground along the western side of the Scheldt, from Avelghem to Meersche,

from which the main Franco-American advance would have been enfiladed. On a line of some six miles the British troops fought over the riverside sector of the railway from Courtrai to Audenarde. Scottish and Welsh troops carried Anseghem, while the French struggled, in the manor-house of the village, against a German garrison which held out long after the Welsh Fusiliers, Scottish Borderers and Scottish Rifles had taken the street and wood. It was not until the second day of battle, November 1, that the French carried the manor house. In the meantime Lancashire Fusiliers, Durhams and other battalions attacked over the hills and water-courses southward, taking 1,000 prisoners in the course of the day, and driving the Germans over the Scheldt to the hills covering Renaix.

While the French were fighting in the manor-house alongside the Welsh and Scots, the Americans in the centre stormed into Waereghem and made a remarkable advance through wired woods and flaming farms where the Germans fought among the Flemish peasantry so that the guns of the attack could not intervene. British, French and American infantry had to work forward without artillery and carry farmsteads and hamlets with rifle and bayonet in order to save the civilians.

In the night of October 31 the Germans fired many farms, which served to illuminate the closing struggle of the American and French forces who drove the Germans across the Scheldt. The Americans entered the western part of Audenarde on November 2, after an advance of 10 miles in two days, and found an intact bridge over the Scheldt. The French made a similar sweeping advance, and, on reaching the river, wheeled on their left between the Lys and the Scheldt, charged into St. Denis Westrem, the south-western suburb of Ghent, by the Lys, and approached within three miles of the city directly southward by Seevergem, on the Scheldt. As a result of this outflanking movement the northern wing of the German army withdrew hastily from the Schipdonck canal, pursued for some 10 miles by Belgian machine-gunners in light tanks. Ghent, however, did not fall as quickly as its citizens expected. The German marine corps, with the German 4th and 6th armies, still held in a general way to the Scheldt canal and the Terneuzen waterway, from the Dutch frontier at Selzaete to the floods by Condé above the road to Mons.

CHAPTER 16

Battle of Flanders

Some of the information which the German secret service system obtained with regard to the intentions of the British Admiralty was undoubtedly correct. When, for example, plans were made for a great landing battle on the Flemish coast, in which flat-bottomed boats carrying tanks were designed to play a leading part, the details of the scheme reached the German staff about six months after the idea of a landing had been abandoned. Then the German marine corps and coastal engineers had a period of exciting activity in designing and constructing the great works which were to break and shatter the threatened invasion. The Ostend esplanade was honeycombed into shell-proof machine gun positions; the long line of sand-dunes was more strongly fortified than the cliffs at Gallipoli had been; and on the sands, over which the tanks were expected to charge, various kinds of steel obstacles and traps were built.

From apparently the same source as that from which the original British plan had been disclosed, information was obtained by the enemy, in the second week of October, 1918, that the great landing battle would be opened on the 14th of the month. Admiral von Schröder had been preparing to evacuate the shore since King Albert opened the Flanders offensive towards the end of September, but the work of removing the heavy guns and huge stores and getting the ships in port away was exceedingly difficult. General Sixt von Armin, with 20 divisions of the German 4th army and many divisions borrowed from the German 6th army, under General von Quast, at Lille, was making a prolonged and determined stand by Dixmude, Roulers and Menin in order to win time for the transport of material and the strengthening of a series of new lines by Ghent and Antwerp.

The news that the British intended to force a decision in Flanders by means of a landing battle was, therefore, disconcerting. The German high command had not allocated to its northern wing sufficient reserve forces for a stand in strength along the coast in addition to a covering battle between Lille and

Bruges. There was a panic retreat in western Flanders. As far back as Bruges German officials and civilians fled. In Ostend no Germans remained, except some gunners left to cover the withdrawal. For nearly two days the Flemish people were free of the invaders, who, however, returned for a very brief time on finding no British force attempting to storm the coast.

When the bombarding ships opened fire in the early morning of October 14 no reply came from the German coastal batteries. It was not until some British ships made a reconnaissance by West Deep, under cover of a smoke-screen from motor-launches, that the big German guns awoke and blazed into the bank of artificial fog. In the evening a flotilla of motor-boats made a dash inside the mole of Zeebrugge towards the Heyst beach and loosed torpedoes at various targets, while a strong group of British aeroplanes first lighted the scene with flares and then bombed the enemy. These operations kept the German rear-guard busy, and in the night some of the gun positions at Zeebrugge were blown up.

On the whole, however, the British device of warning the enemy of something that was not to happen did not produce its full effect. What was required was that General Sixt von Armin should lend some of his divisions to Admiral von Schröder for the shore battle. By practically evacuating the coast and concentrating against the Flanders group of armies General von Armin unwittingly did the best thing in the circumstances.

While the demonstration along the coast was proceeding, the three Belgian, British and French armies, under the direction of King Albert, resumed their advance between the Lys river at Comines and the Yser at Dixmude. Upon the British divisions, under Sir Herbert Plumer, fell the most important part of the work. The Belgian forces, which had done most in carrying the Flanders ridge at the end of September, still retained a masterly part in the operations, but the veterans of the former Ypres battles now struck the heaviest blow. Their task was a double one. They had to prolong their defensive flank down the Lys river so as to guard all the attacking forces from a grand counter-thrust by the German 6th army round Lille. Then they had to inflict a great strategic defeat upon this German army on their right flank by driving with their left through the German 4th army to the middle reach of the Lys river above the Flemish town of Courtrai. There, on a position behind Lille, Roubaix

and Tourcoing, they could cut General von Quast's northern railway communications running through Courtrai and clean outflank him. Covered by the British advance, one Belgian force was to strike south of Roulers towards the Middle Lys, while the French army under General Degoutte carried Roulers and advanced on Thielt, and the main Belgian force attacked Thourout and swept towards Bruges and the Dutch frontier.

Everything depended on the pace and power of the southern British movement. This was conducted by the 2nd corps, under Lieutenant General (later Field Marshal) Sir Claud Jacob, comprising the 9th division, the 29th division and the 36th division. The 19th corps, under General Sir H. E. Watts, employing the 41st division and the 35th division, each of which had assisted in the first operations, took part in the drive and also the 10th corps, under Lieutenant General R. B. Stephens, employing the 30th division and the 34th division, which had been in reserve at the first battle, joined in the struggle.

Once more Sir Claud Jacob and his men proved the irresistible spear-head. The German emperor had stopped some officers and men of the Scottish and South African 9th division, captured the previous April in the struggle for Messines ridge, and had told them he was glad that there were not two 9th divisions in the British army. He said he could not have made headway if this had been so. The immortal force of veterans and youngsters had not lost any of its edge and speed in battling over the Passchendaele ridge, and with the equally renowned battalions of the 29th division and the gallant men of the 36th division they met and broke a large part of the combined forces of the German 4th and 6th armies.

General von Armin, who had fought the British from the Somme downs to Passchendaele ridge and Kemmel hill, stood in manful fashion for the decisive struggle. He changed the disposition of defence which he had used for more than two years and placed his troops densely in the fighting line, with hundreds of guns closely supporting them. There were two German battalions deployed to take the shock, with only one battalion in support. The German commander had the desperate hope of balancing the defeat at Le Cateau by a defensive victory in Flanders which would relieve pressure all along the line. Moreover, some of the German troops were half demoralized by the opening of peace negotiations, and disinclined further to risk

their lives. If these troops had been deployed widely and in great depth there would have been a weakening of control over them. Everything, therefore, concurred in inducing General von Armin to mass for battle with a nominal establishment strength of nearly 250,000.

The British 2nd army was at a disadvantage in comparison with the Belgian and French forces. While some of the ground on the northern front of attack was firm enough to allow Renault storming cars and whippet tanks to charge with dismaying effect, none could be employed in the southern waste of mud round Menin. The 2nd British corps had to make its thrust without its special machine of victory and bring all its material over the worst piece of ground on the western front.

The leading British divisions struck the German forces north of Menin and drove them from Moorseele and Heule towards Harlebeke, on the Lys, north of Courtrai, some 11 miles above Lille. While the great centres of manufacture in north-western France were thus being turned by a movement through the Flanders lowland, the 10th and 19th British corps fought towards the rising ground by Comines, Wervicq and Menin. Along this line divisions of the German 6th army protected themselves to some extent by making walls of flame out of the outer buildings of the menaced towns. The German line along the Middle Lys by Wervicq gave easily, although it was covered by pill-boxes, with a fortified railway embankment and a canalized stream overlooked by German gunner observers in church towers and high-roofed buildings. No town or hamlet on the Lille side was carried by storm, as the operations were merely intended to prevent the Germans from making a counter-offensive against the base of the enlarging salient of the Allied advance. All frontal attacks were avoided on towns, because they would have drawn the German gun fire on the buildings and people sheltering in them.

The method adopted was for the British 60-pounders to cover the objective with a vast cloud of smoke, through which two infantry forces made flanking thrusts and connected in the rear. The crews of the pill-boxes, when blinded by the artificial fog, could either warn the invisible British troops of their whereabouts by working their guns aimlessly, or wait without fighting until they were encircled, and bombs could be thrown into them from their weakly built rear side. The great smoke-

screen method was indeed a device as important as the use of storming cars. This was seen in the main field of battle north of Menin, where the Germans had a great advantage in ground, and fought with heroism. It was a land of hedges and ditches, and the Germans were stretched in the mud behind low bushes in which were hidden new wire entanglements. The ruined villages had been fortified in 1917, and the pillbox system that began near Ypres had been gradually extended beyond Menin.

Bavarians, who had been resting for months, held the ground, together with a famous German cavalry division. Their gunners drenched the British positions with gas during the night, knowing that an attack was impending, and when the British barrage crashed over their line the Bavarians rose and came forward in the Gommécourt fashion of 1916. Stout-hearted as these men were, however, they could not stay the Scotsmen, Englishmen and Irishmen under Sir Claud Jacob. The 9th division went through two deep lines of wire heavily defended, rushed the rows of concrete forts, reaching the river with their front line, and counter-attacked on three sides. From Winkle St. Eloi, the point of contact with the Belgians, the troops fought hard along the canalized Heule stream towards Gulleghem. Irish troops captured Moorseele about noon, and with their comrades reached the wire entanglements by Heule village and wood at five o'clock in the afternoon. There they waited for guns to break the wire.

In the meantime, English troops stormed into the German line immediately above Menin, scattered the defending infantry, and by Roesthoek farm charged a battery of 5.9 howitzers, capturing every officer and man unhurt. Some of the fiercest combats took place along the Heule stream, which was a waterway about 12 feet wide, with the banks lined with machine guns firing from pill-boxes and concrete-strengthened cellars. The separated little forts held out stubbornly but unavailingly. By dusk the British had a straight line near the Lys above Courtrai, and bringing forward some of the captured guns they shelled the German machine gunners out of Heule village and sent them scurrying into Courtrai. In the early morning of October 15 the artillery of attack swept the last entanglements away, and the Irish troops, leading the pursuit, closed with the German rearguard in the northern part of Courtrai and carried the buildings as far as the Lys. The Germans then lined the farther bank with covered machine guns, while most of the

Flemish population of some 30,000 people had to take refuge in their cellars alongside their persecutors.

One attempt was made to force the canal by a surprise stroke, and some 60 men of the Middlesex and Queen's Regiments, who arrived from the south, by Menin, poled themselves over the water in pontoons, and, under point-blank fire, stormed some of the houses and held them until nightfall; but the party of attack was not large enough to overawe the Germans, and in order to prevent the city being destroyed by the German guns, Sir Herbert Plumer ordered that the enemy should merely be contained along the waterway. By this time all the Courtrai position was turned, some miles northward, by Harlebeke, which the left wing of the 2nd army reached immediately the Germans broke around Heule. While resting in and above Courtrai the German commander cleared the middle course of the Lys, and through Menin and Wervicq began to encircle Courtrai on the south, and turn Tourcoing, Roubaix and Lille from the north.

In the night of October 15, finding that the British did not attempt a further advance, some German officers induced their men to return and hold the high positions on the extreme right by Halluin. When daylight came, with a thicker, wider British smoke barrage and a heavier shower of shell, the Germans again broke, and the attacking troops sent back an urgent message asking to be allowed to spread beyond their objectives. It was necessary, however, for the British 5th army to pass round Lille, and come into line with the British 2nd army before the next grand advance could be made. Meanwhile, the Belgian and French forces, composing the rest of the command of King Albert, had a similar experience to that of the British forces. The Germans met them in massive strength immediately action opened. As soon as General von Armin's line was broken, however, many of his remaining troops could not be induced to make a long stand.

The French had a fierce struggle round Roulers. General Degoutte closed round the town from three sides, his men meeting immediately behind the barrage, counter-charging the Germans and bearing them down with the bayonet and the fire of storming cars. One French battalion swept towards the market square, pushing back enemy machine gunners, until a German gunner officer, whose field gun was trained upon the open space, gave the order to fire. Among his men, however,

was an Alsatian, who shouted: "Don't fire! Surrender!" He covered the German officer with a revolver, and the battery surrendered instead of shattering the peopled town with its shells. At the same time another German officer gave orders for all mines to be exploded. It was intended to transform Roulers into another Louvain; but the engineer left in charge of the mines was also an Alsatian, and though he could not prevent all the mines exploding, he stopped many of them.

Between Roulers and the British forces working above Menin was an admirable Belgian division, provided with light British tanks. They greatly helped the British thrust into Courtrai, and arrived themselves at Iseghem, close to the important railway junction of Ingelmunster. Here the Germans had another tributary of the Lys as a defensive moat, with a range of low hills immediately behind it. Down the three railway lines meeting near Iseghem the German commander sent a succession of strong counter-attacking forces. Three times the Belgians were obliged to draw back; but every time they did so they returned and crushed the Germans who had advanced beyond the cover of the hills and stream. They fought into Lendelede, by the railway running between Courtrai and Iseghem, and gradually worked across another railway line to the high ground by the Lys. As the Germans had a gridiron of railways in this sector, the embankments of which they had fortified and screened with pillboxes, the task of the Belgians required the highest technical skill, in addition to valiant courage.

Above Roulers the main Belgian forces of attack fought across the Dixmude-Thielt railway, towards the centre of West Flanders, at Thourout. They stormed Cortemarck and Handzaeme. This movement threatened to turn the German positions on the coast. The German rearguard at Westende, for example, was 15 miles behind the victorious forces. A retreat towards Bruges and Ghent was imposed on the German commander, who drew his troops from the Yser to strengthen himself temporarily at Thourout. The French army, however, severed direct communications between Thourout and Ghent by carrying the Hooglede upland and cutting the railway line above Beveren, from which point General Degoutte began a double turning movement round Thielt and Thourout.

On October 15 the main Belgian forces closed directly on Thourout, enveloping it, while the French converged on the town

by Lichtervelde. It was then exactly four years to the day that western Flanders had fallen to the Germans, and in the night they prepared to retire, being considerably harried by the Belgian forces remaining along the Yser, between Dixmude and Nieuport. The Belgians' proper task was merely to watch the Germans quietly, as they were being turned from the east; but they became so restless that King Albert allowed them to take part in the advance. Springing over the flooded wilderness, they caught and broke the Germans at Keyem, Schoore, and other vanished villages, where they had been overwhelmed by superior strength in 1914, and they chased the German rearguards for three days until they reached the Dutch frontier.

Zeebrugge began to smoke like a volcano, the Germans setting their oil fuel and other stores on fire and sinking the vessels which they were unable to remove. By October 16 the Belgians on the right had reached the Lys, after taking Ingelmunster railway station, and on the left they were working along the coast towards Ostend. That night the German retreat quickened throughout western Flanders, beginning with a retirement on a 32-mile front to a depth of 12½ miles. Soon after daybreak on October 17 the infantry of the attack found so little resistance in front of them that Belgian and French cavalry were employed to reconnoitre the country. In spite of the difficulty of making speedy progress through the closed and diked lowlands and over the embanked, cobbled roads, the outskirts of Bruges were attained at nightfall. Ostend was reached still more quickly by aircraft and naval forces under Vice Admiral Sir Roger Keyes. Destroyers and seaplanes approached the coast, and at 11 a.m. a British airman landed on the beach. Half an hour afterwards Sir Roger Keyes entered the harbour in a ship's whaler and proceeded ashore.

The Germans at the time were not clear of the town. With a light battery in the neighbourhood they opened fire on the ships, sending shells upon the beach crowded with people. Four German heavy guns at Zeebrugge fired on the British destroyers, and as it seemed likely that the Germans were waiting for an excuse to shell the town, which in places they had mined with long-delayed-action fuses, the British admiral withdrew his forces, leaving four motor-launches inshore as a patrol. In the evening, when all had been quiet for some hours, the king and queen of the Belgians landed in Ostend from the destroyer

Termagant, and, in a scene of popular enthusiasm, went to the town hall, returning to Dunkirk by sea late at night. The Belgian cavalry arrived in a gallop along the shore.

The Germans, while they did not seriously damage the historic seaport, wrecked the plants and broke the connexions of gas, electricity and water services, and, after dragging the Vindictive to the piling of the pier, they again blocked the fairway with sunken vessels, so that food could not be brought by sea to the people. But the British bombing aeroplanes, which had fed the Allied army on the Flanders ridge at the beginning of the month, lowered supplies by parachute until the way was clear for food to be sent by ordinary methods.

At any time the recovery of Ostend would have been an event of high significance. No reconquered French town compared with it in strategic importance. By losing it the Germans lost their partial hold upon the narrow waters of England and their means of making short-distance bombing raids upon London, Dover, Sheerness and Woolwich. The German marine office had at once to prepare to send out its naval forces for desperate action between Harwich and Dover, in the forlorn hope of being able to deal a stroke counter-balancing the loss of the command of the Flemish coast. The increased facility in traffic won by the Allies aggravated the Germans' peril. As soon as the Flemish fairways were cleared and the connecting railway lines freed of mines and repaired, there would come a new flexibility in manœuvring great masses of men and guns.

The recovery of Ostend showed how far-sighted Sir Douglas Haig was in the strategic aim with which he tried to conquer the Flanders ridge in 1917. He had to open his campaign late in a rainy year, and he was further delayed by the need for pressing the Germans elsewhere at the time when the French front was weakened by outbreaks of unrest and the Russian front dissolving through treachery. Sir Douglas Haig failed in his grand design; but his men who fell between Ypres and Passchendaele did not fall in vain. Although the Germans returned over their bodies, their tragic heroism purchased the means of victory for their comrades of the British 2nd and 5th armies, and for the Belgians and French. They won the knowledge which others triumphantly used; indeed, if they had not come so close to a grand decision against the concentrated main forces of the Germans in the year of their renewed strength, the final victorious

offensive in Flanders might not have been undertaken even when the Germans were permanently weakened.

The British 5th army, which had shared fully in the earlier Flemish campaign, was again joined with the British 2nd army in the glory of the decisive advance. In the morning of October 17, about the time Sir Roger Keyes was landing at Ostend, a patrol of the Liverpool Regiment, working down the road from Armentières, entered Lille, but at once swung round the city north and south in pursuit of the out-manœuvred enemy. Sir William Birdwood, commanding the 5th army, took much trouble and lost some time in keeping his forces out of the streets, which were crowded with rejoicing people, in order to allow the enemy no shadow of excuse for turning guns on the thronged ways of the city, or sending bombing aeroplanes by night to wreck the buildings.

With happy thoughtfulness a French regiment, which had been fighting alongside the British, was sent first into the centre of Lille, and Lieutenant General Sir R. C. B. Haking, whose 11th corps had held the sector near the city for three years, dispatched the flag of his army corps to Paris, to be placed on the Lille statue in the Place de la Concorde, when he entered the city on the evening of October 17. The mayor of Lille did not have to wait, however, for French or British infantry to learn that his city was free. At dawn of the day of liberation, while General von Bernhardi's men were marching away eastward to escape envelopment by the British 2nd army on the Lys and the British 1st army on the Sensée river, friendly pilots came flying low over the houses. One of them landed by the public gardens. He was Captain Delesalle, the son of the mayor.

The suburbs of Lille had been looted, and the factories were not in working order, as the Germans had taken the machinery, or destroyed it. But M. Clemenceau's stern threat of reprisals, and the speed and vigour of the British encircling movements, prevented them from fully carrying out their project.

General von Bernhardi showed considerable cunning in the last phase of the struggle round Lille. After being driven back from Merville to his original line, and then forced to abandon the Aubers ridge, he placed his 8 in. batteries in Vauban park, inside the city, and there fired them furiously, to use up ammunition he could not take away, and to incite the heavy British guns to counter battery work upon Lille.

General Haking and his men suffered in silence, and when, on October 14, Bernhardi found he had failed to provoke either a frontal attack or a bombardment, but was being turned from the north, he hauled his guns away from Lille, which he placarded with the statement that the townspeople had nothing to fear, as he had persuaded the British not to damage the city. On the same day of liberation a force of Yorkshire cyclists, coming from the north in search of enemy rearguards, reached the edge of the weaving town of Tourcoing. The Yorkshiremen were told not to enter the streets, but many thousands of women

and girls and boys surrounded them, and carried them, as well as the British general, to the town hall. Similar scenes of rejoicing occurred in the connecting town of Roubaix, entered by Lancashires and Yorkshiremen, and the whole of the great industrial district centring round Lille celebrated its emancipation almost simultaneously.

On October 17, when the first harvest of the decisive victory of Le Cateau was gathered between the Sensée river and the sea, the British 4th army, under Sir Henry Rawlinson, resumed the offensive, in conjunction with the French 1st army. Only five days had passed since the breaking of the enemy's last fortified

line and the skirmishing along the Selle river. Short as the time was, it was sufficient to enable the Royal Engineers and pioneer forces to prolong communications through the Le Cateau front and organize the means of another general assault. General Debeney's sappers and road-makers were equally quick at their work. The Germans were surprised at the speed with which the great movement against them was renewed in strength by means of night marches by foot, guns, motor-lorry columns, steam tractors and tanks, combined with superb staff work in placing the troops and ranging the artillery. Sir Douglas Haig and his lieutenants were the great masters of this method, which enabled them to burst upon the Germans in force from ground that seemed the evening before to be occupied only by covering outposts. The method dated from 1917, before Marshal Foch assumed supreme command.

General Rawlinson attacked on a front of 10 miles from the south of Le Cateau to the neighbourhood of Wassigny, along the Selle river, and the difficult wooded country of Andigny forest. General Debeney also attacked on a line of 10 miles from Andigny forest to Ribemont, on the Oise river, pressing with most force towards Guise. The 9th British army corps, 13th army corps, and the 2nd American army corps came into action, employing the famous Midlanders of the 46th division, the veteran 1st, the 6th, 50th and 66th divisions, with the 30th and 27th American divisions, which had taken a notable part in the fighting by Nauroy and Bohain. The Germans had been greatly reinforced by the armies withdrawing to a shorter front north and south of them, and by the general reserve of their high command. There were some 90 German divisions between the Dutch frontier and the Oise, and most of them were massed against the British.

All along the front of battle at dawn on October 17 the Germans made a stubborn resistance, fiercely counter-attacking and bringing a heavy artillery fire to bear, in spite of the loss of much of their gun-power. Le Cateau was cleared as far as the railway embankment, and below this famous town of battles the Selle river was most gallantly forced, and ground won in bitter struggle in the direction of the Oise-Sambre canal, by Bazeul. The American troops fought forward to the hills by the canal, while the 13th British corps drove towards Wassigny junction.

The veteran chasseurs, infantry of the line, and dismounted cavalry under General Debeney were faced by two serious

CANADIAN ENGINEERS BRIDGING THE CANAL DU NORD, NEAR CAMBRAI

This striking photograph shows Cambrai in flames, the main square burning on three sides as the Canadian troops made their entry, October 9, 1918. In the battle for Cambrai, September 27 to October 5, 1918, the Canadians suffered severely, but their gallantry brought great results.

In this historic photograph the British commander-in-chief, Sir Douglas Haig, and M. Clemenceau, the famous French statesman (who in November, 1917, had again become premier), are seen inspecting a guard of honour in Cambrai after its capture, October 9, 1918.

HISTORIC SCENES IN CAPTURED CAMBRAI

Imperial War Museum

DIVINE SERVICE IN A RUINED CATHEDRAL. Cambrai cathedral, in which British troops are seen here at service in October, 1918, was built in the 19th century. The Germans occupied Cambrai almost throughout the war, and before being forced to leave on October 9 1918, heavily mined it so that explosions and fires destroyed a large area in the centre of the city.

THE LONDON SCOTTISH MARCHING THROUGH ES SALT, PALESTINE, SEPTEMBER, 1918

obstacles, consisting of a block of hills in the Guise sector and the mass of Andigny forest, north of the town. They shook the enemy by storming Origny hill on the Oise, from which they threatened to turn the Serre line which General Mangin pressed above Laon. Then they settled down alongside the British and American troops for the main struggle for the approaches to the Sambre canal. As was his wont, General Debeney employed light forces of infantry, under a heavy barrage, in which masses of 75's were used with intense effect. All the Allied line went slowly forward on a length of some 20 miles, bending in places under a fierce counter-attack, but more often withstanding and breaking the Germans' violent attempts at reaction. The charges delivered by the British troops across the Selle were magnificent in driving power and endurance.

As in Flanders, the Germans began to resemble armour-plated wood. In front of their masses of men was a dense line of picked troops, with both courage and skill. A great and prolonged effort was required to bear down the fighting spirit of these ably-handled forces, who counter-charged as the Bavarians did in the north. All through the night the struggle went on, General von Böhn and his army commanders bringing into action reserves hidden in the woods and folds of the woods, when the line broke, and continuing the contest. Although the Germans were in superior numbers, the quality of the Briton proved better than the quality of the German.

In the morning of October 18, when the veritable German rearguard was broken, some 100,000 troops gave ground and allowed the advance to the Sambre canal to proceed at a quickened pace. Wassigny was taken and Ribeauville, and in a fierce flanking action at Bazeul the German positions east of Le Cateau were threatened. Below Wassigny General Debeney's troops stormed through Andigny forest over a distance of three miles, working through wired woodland and various kinds of forest ambushes, which the enemy had expected to be impassable. The block of hills by the Oise was carried with the same skill in manœuvre, and the Sambre canal was reached at Tupigny and other places.

On October 19 the divisions of British, Americans and French continued to fight onward, and after having worn the Germans down in mind as well as in body by a struggle lasting more than 60 hours, they attained the objective desired by

Sir Douglas Haig, which was the west bank of the Sambre and Oise canal, between Catillon and Oisy, Etreux and Noyelles. General Debeney also carried beyond Ribemont the commanding position of Villers-le-Sec, the loss of which compelled the enemy to withdraw between the southern part of the Oise and Serre.

The aim of Sir Douglas Haig in this advance to the Sambre canal was to reach a strategic artillery position. From the high ground by Catillon there was a range of some 12 miles to the village of Aulnoye, by the eastern edge of Mormal forest. At Aulnoye the railway from Valenciennes to Hirson crossed the great trunk line from Cologne and Maubeuge to Landrecies. By winning a position along the Sambre canal, from which he could in the next advance bring a mass of big guns to bear upon Aulnoye junction, the British commander-in-chief began to threaten the enemy's communications between Le Cateau, Guise, the Serre front and the Hunding line. He left only one branch railway, running from Maubeuge to Hirson, Vervins and Marle, safe for some weeks longer for supplying the forces facing General Rawlinson, General Debeney, General Mangin and General Guillaumat.

Moreover, with the terrifying increase in the number and carrying capacity of British and French bombing aeroplanes, the branch line of railway between Maubeuge and Hirson could be continually put out of working order, while the roads, with their columns of motor-vehicles, carts and the narrow-gauge railways, serving the remaining part of the southern Hindenburg defences, also came under attack by the nations who were dominant in the air.

The enemy high command saw what was impending. It placed about half its forces between the North Sea and the Serre river, held the French armies as economically as possible by the Hindenburg works, threw in two more divisions to press the Americans back, withdrew in western Flanders behind a strong canal line at Ghent, and concentrated against the main British armies to prevent a rout through the Ardennes.

In Paris the situation at this period was not regarded in a very hopeful light. Measures were taken to prepare the public for a return of winter warfare. Writers began to point out that the German armies were holding together remarkably well under a succession of heavy blows, making rapid retreat where necessary, as in western Flanders and the Laon corner, and fighting

with great firmness on either side of the gap of Grandpré. The weather, after favouring the Allies, was turning against them, with bitterly cold nights and continued rain, which tested the endurance of moving troops only less than did the ordeal of battle. The marshy valleys of the Aisne and Oise and many lesser streams were flooded ; the swamps by Sissonne, at the French centre, were impossible to cross, and universal mud made heavy work for the supply carts, artillery and ambulances. It was observed that from the Oise to the Meuse the Germans continued not only to hold on with great tenacity, but brought stronger artillery and machine gun fire to bear upon the French and American troops. The floods left only small gaps through which armoured cars could attempt to work along the southern line, and these gaps were covered by special artillery and mine-fields.

There was, indeed, a current of opinion spreading from France to Great Britain and the United States which, by the critical date of October 19, was inclined to see in the new Hindenburg retreat a movement likely to succeed, as a large measure of strategy, even as the enemy's ingenious backward stroke did in the spring of 1917. The German high command was striving to shorten its front from 560 miles to a little over 300 miles, leaving delayed-action mines along all abandoned routes of supply in order definitely to win a practical winter armistice. As, however, Sir Douglas Haig afterwards explained in his classic dispatch, his armies were no longer conducting a battle, they were pursuing an enemy whom they had broken.

The British armies had to struggle continuously against the odds of two to one in order to perform their leading part in both the defensive and offensive campaigns of 1917 and 1918. The French forces had been eased of the main burden of the western conflict after Verdun, and had definitely taken the position of brilliant second after General Nivelle's attempt to break through to Laon in April, 1917. The American forces were as rich in promise as the new British armies had been at the beginning of the first battle of the Somme, with an expanding list of divisions, but their principal value at the time was that of forming a reservoir of strength for attack.

Marshal Foch had so arranged things that the Allies were in immediate possession of means of victory on the British front, and also assured a definite success on the French Lorraine

front, and finally assured again of triumph by the increasing strength and experience of the American forces. In case of future need there were also opening other lines of advance into Germany, owing to the capitulation of Turkey and Bulgaria and the imminent collapse of Austria-Hungary. Nevertheless, in the month which was the turning point in the history of the modern world, the British army was paramount.

The Germans were steadily pressed, and by the date of the armistice on November 11, 1918, the Allies had reached a line which ran from the Dutch frontier south of Terneuzen to Ghent, and then along the Schelde past Ath to a point near St. Ghislain, where they linked up with the main group of the British armies under Sir Douglas Haig.

In this battle of Flanders the British captured 6,000 prisoners and 210 guns, while the French and Belgian captures were about as large. The trials of the Allied troops were severe; they had to march and fight in most difficult country with deplorable communications which rendered the supply of food and ammunition exceedingly difficult. Marshal Foch, who visited the British 5th army, gave the British troops just praise for the magnificent character of their work. "Your soldiers," he said, "marched when they were exhausted, and they fought, and fought admirably, when they were worn out. It is with such indomitable will that the war has been won."

In conclusion much could be said about the work of the British troops in supplying food to the people of the liberated cities and in repairing the railway lines which made this work of mercy possible. For example, in less than eight days after General Hacking's army corps passed round Lille the first train of supplies for the civil population ran into the city, the railway being carried across the Lys river at Armentières by a bridge erected in four days. By the end of October the British construction troops had brought into service 1,050 miles of line more than had been available in August, 1918. Of this nearly half consisted of new track, and the rest was line destroyed by the retreating enemy to hinder pursuit.

CHAPTER 17

The Meuse-Argonne Offensive

THE great influx of troops from America in the summer of 1918 had given Foch a considerable superiority in numbers. The spring crisis had passed, and the American army staff had acquired experience. It was possible, therefore, to give effect to America's original conception of an independent army organized and controlled by Americans, although its supreme direction, like that of the French and British armies, would rest in the hands of Foch.

The reduction of the St. Mihiel salient had been in the minds of Americans from the time of their first arrival in France. Its elimination would be of great service to the Allies, and the task would furnish the American 1st army with just that sort of restricted operation from which new troops and a young staff may acquire experience and confidence. Accordingly, after the final repulse of the German offensive on August 6, General Pershing began to collect his army around Toul. One by one the experienced American divisions which had been brigaded with British and French armies were withdrawn and transferred east to join the new American divisions. Some of the old divisions were, however, left with the British and French, and remained under their command until the end of the war.

At a conference between Foch, Pétain and Pershing on September 2, the plan of operations was discussed. The attack on the salient was to be the preliminary operation in a series which was to comprise an offensive in the Meuse-Argonne area, and in spite of Pershing's wish to be allowed to attempt a major offensive and if possible smash the Hindenburg line behind the salient, Foch was adamant and insisted that the operation should be limited to the reduction of the salient proper. Foch's plans for his great drive were almost completed, and in them the Americans were allotted a specific part. He could not afford to let them waste their strength on, nor give them the time for, an offensive which at most could only drive a salient into the German lines towards Metz.

The German possession of St. Mihiel constituted a perpetual threat to the Allied line. Road and railway were cut between Toul and Verdun, and the enemy had obtained control of some of the most important French lines of communication. Verdun was left with only a narrow-gauge line of supply, which condition provoked a prolonged assault on the fortress in 1916, during which a new railway was constructed by Révigny. The Paris-Nancy trunk line, feeding the central sectors of the French front, was cut near Commercy by batteries in the St. Mihiel wedge. The traffic had for years to be diverted southward by Gondrecourt, taking more time and diminishing the French railway power. Marshal Foch needed the Paris-Nancy main line in full working order to increase his power of conducting offensives from Verdun. The American operations against St. Mihiel, though apparently of local importance only, were a declaration of a return to the offensive by the Allies.

In the winter of 1914 and the spring of 1915 the generals of the French armies along the heights of the Meuse made strong attempts to conquer the salient, and the fighting in the Bois le Prêtre, Apremont forest, and Les Eparges hill was of fierce intensity. But the slight dents formed at heavy cost in the enemy's line were of little importance. The Allies had not the means of breaking the German front, and when they obtained heavy artillery they preferred to concentrate in Champagne. St. Mihiel remained an obstacle on the eastern border, and until Marshal Foch arrived at supreme command no further strength was spent in essaying to remove the check to operations against Metz and the threat to the Nancy sector.

The Germans, after holding it by methods of open field warfare against the forces of two French armies, employed all their growing science in fortification upon this extension of the Metz defences. Their last work of importance was the construction, in the spring of 1917, of a Hindenburg line along the base of the salient to guard against a surprise offensive reaching the most important of their railway centres and the ironfields by Metz, from which their material for munitions was largely obtained. Metz and its neighbourhood formed the most sensitive sector of the German front.

By September 12 the American army was assembled for attack. Over 400,000 Americans with nearly 50,000 French troops with enormous tank and artillery support and hundreds

of aeroplanes were in position. No particular secrecy had been preserved about the impending attack, and the Germans were well aware of their danger. The construction of the Hindenburg line across the base of the salient proved that they were under no illusions as to the possibility of holding St. Mihiel. Faced with the threat of extinction, General Fuchs, the German commander, began to prepare an evacuation of the salient by withdrawing his heavy artillery towards the rear of the Hindenburg line at Pagny. He had a division of Austro-Hungarian troops to strengthen his right flank below Combles, but a large body of German infantry remained in the menaced salient when the guns of the attack opened a tremendous fire in the early morning of Thursday, September 12, 1918.

It was at 1 a.m., in rain, wind and darkness, that the American artillery opened the attack. Across both sides of the salient, round a line of some 33 miles, they hammered the small garrison of 60,000 men for four hours. When the action of the American infantry and caterpillar-cars opened at 5 a.m. the German defensive barrage was of exceptional feebleness. The Germans had delayed their evacuation for too long.

They were caught with both their heavy and their light guns crowding in motion along the two roads, by St. Benoit and Thiaucourt, that led from the salient to the extension of the Hindenburg line about Jaulny and Dampvitoux. Many pieces were damaged by the prolonged tornado of shell, and few were able to turn about and maintain anything like curtain fire owing to the immediate lack of ammunition. Fresh shell-dumps were being arranged behind the Hindenburg line, and old dumps were being removed from the valleys between St. Mihiel and Thiaucourt. The gunners were practically impotent.

Instead of being able to cover the retreat of the infantry they had to ask them to fight in order to save the guns. The timing of the operations saved the Americans from the German guns, and also compelled the German infantry to remain and fight without artillery support. The Americans first advanced on a front of some 12 miles against the southern side of the salient between the Moselle river by Pont-à-Mousson and the dominating promontory of Mont Sec by Xivray village.

Preceded by contact machines, the infantry waves and lines of tanks drove into the ravines, through the fir woods, and over the ridges. On the left of the quarries by the Moselle the progress

of the storming cars was hindered by a wooded steep, but the troops battled onward without the help of their travelling artillery and won their objectives. Farther along the line, where the land was more open, the tanks manœuvred upon enemy machine gunners and riflemen, and broke through towards the Thiaucourt road. Forty-five minutes after the infantry and cars began their advance, the first villages were taken.

One of the hardest routes of advance was the Rupt de Mad, a ravine running to Thiaucourt from Seicheprey, between the large ridge by which St. Baussant nestled, and the mass of Mont Sec. Mont Sec was a natural fortress, 1,200 feet high, from which the enemy commanded all the country as far as Pont-à-Mousson, and for four years by artillery fire had cut the Paris-Nancy railway. It overlooked the American positions by Seicheprey, and, by reason of its deep shelters and long fields of plunging fire, enabled some Germans to resist and save the central line of retreat by the Vigneulles road. French gunners, however, kept Mont Sec completely blinded by a smoke barrage while the American attacks converged on Thiaucourt.

There was also heavy fire, from machine guns and automatic rifles from the St. Baussant promontory, against the right flank of the Seicheprey force. This was beaten down as daylight broadened. With light railways feeding guns of all kinds, a torrent of shell blasted away opposition.

With the aid of tanks, contact aeroplanes, stationary batteries, and numerous guns that moved behind them, the American attack from the south had reached its objective by 11.30. Thiaucourt, one of the two key positions near the base of the salient by the Meuse, was almost in their hands, and one of the roads out of the point of the salient was cut. The Germans' rear was enveloped. The longer they resisted along the upper part of the ravine the more men they would lose.

Immediately round St. Mihiel, where the enemy had a small bridge-head over the Meuse river, the French Colonial troops had little to do but to wait and help gather the harvest of victory. They began to worry the German garrison by raids some three hours after the southern American attack opened, but they refrained all the day from breaking into the town. On the western side of the salient, stretching from Fresnes to the Meuse river, another French contingent formed part of the American 1st army in the first of its great engagements.

These French crack troops, including the Chasseurs-à-Pied, who had helped the British 5th army between the Somme and the Oise, were actively employed. Alongside United States forces they attacked on a front of eight miles by Les Eparges, Combres and the Grand Tranchée Calonne.

The operation began at eight o'clock in the morning when the situation was ripe for the second movement of envelopment. This second movement was more difficult, and the delay in carrying it out was partly designed to draw General von Fuchs' local reserve towards the Thiaucourt ground, where the success of the attack was assured, and thus facilitate the thrust into the cliffs of Lorraine, between the Orne river and the Verdun outworks.

The enemy had tunnelled into the high hills and burrowed beneath the upland forests. Since the fierce wrestle in the early part of 1915 he had not only elaborated his works but had enlarged his ground by pressing towards Verdun from the south-east during the prolonged action of the northern line. But the French and American troops were not to be denied. Storming forward they seized one position after another, taking hundreds of prisoners. A slight check occurred as the result of a stubborn stand by the Austro-Hungarian division near Combres, which clung to its position until over half its numbers had been killed or captured. But the American attack was too overwhelming to be held up for long, and the German resistance was rapidly broken. It must be remembered that the Germans were practically without artillery support, and the poor resistance they offered both on the north and south of the salient largely resulted from that fact. By 4.30 the French and Americans had pushed through Dommartin. The American pincers were rapidly closing, as Thiaucourt in the south had fallen already.

The enemy was everywhere in retreat and making desperate efforts to get his artillery along the Vigneulles road. It was an impossible task. The rains of the previous days, which had hampered the movements of some of the tanks, made the roads in bad condition. The roads, moreover, were incessantly swept by fire from both sides of the narrowing strip of the salient.

At eight o'clock in the evening St. Mihiel was evacuated by the Germans without a struggle, and into the strangely intact town French patrols began to work. At daybreak the remaining population of 2,000 women and children, with a few aged men, were rescued by their countrymen.

At midnight the victorious northern American force broke across all the Lorraine heights and entered the central village of Vigneulles. There they fought for three hours against the German forces they were enveloping, winning the village and the road early on Friday morning. The southern American divisions, which had been fighting from the Rupt de Mad into the woods in the heart of the salient, also emerged on the Vigneulles road about eight o'clock on the same morning. The pincers closed 27 hours after their movement began. Large remnants of two German divisions, with more than 100 guns, were at once enveloped. Throughout the 13th, 14th and 15th further local advances were made until the line was straightened. But Foch had forbidden any extensive advance, and the Americans rested content when they came up against the Hindenburg line.

The operation had been a great success. The St Mihiel salient was obliterated, the American army had acquired confidence and coherence, and the army staff had proved itself. A steam-hammer had been used to crack a nut, but much greater resistance had been expected. In the circumstances the Germans had escaped at comparatively little cost, losing only some 15,000 prisoners and some 200 light and field guns. The bulk of the garrison and their heavy artillery, together with most of their stores and ammunition, was safely across the Hindenburg line. But the demoralization which was steadily growing in the German armies had been increased by the defeat, while the troops of the Allies were correspondingly elated.

When the German armies poured into France during the last months of 1914, their easiest route had been through the plains of Belgium and then southwards through Mons and Valenciennes. Farther east, on the other side of the Ardennes, they had struck down from Sedan and Mèzieres towards Reims. Along the eastern boundary of the country through the Nancy and Belfort gaps in the Vosges they had come up against the resistance of the French frontier fortresses at Verdun, Nancy, and elsewhere. But their two great roads of entry and of retreat, the one Mons-Valenciennes, the other Sedan-Mèzieres, were connected across the southern face of the impenetrable Ardennes by the Carignan-Sedan railway. If that line were cut, then not only were communications broken between the armies in Belgium and those in north-eastern France, but also the retreat of all their forces was seriously menaced. Germany's most sensitive spot was along the

Meuse north of Verdun. Not only did that part of the line threaten Metz and her great industrial centres, but here was the only route of escape for her armies fighting with their backs to the Ardennes. Foch's plan was based on these facts. While the French who held the centre of the Allied line thrust strongly against the German centre, the British from Amiens and French and Americans from Verdun should strike suddenly against the German wings, the former at Mons, the latter at Sedan.

These attacks were to be made almost simultaneously. Abandoning the German policy, which the Allies had so far copied, of delivering terrible blows on one selected point in the line, Foch was preparing to throw the whole of his available forces against the German front from the North Sea to Verdun. In this way he hoped to pin the German reinforcements and prevent them from concentrating against one threatened point, thereby nullifying the superiority in numbers which the Allies possessed. Only the vast inflow of American reinforcements, week by week, made the execution of this plan possible. With the capture of Mons and Sedan the northern gateways to France would be closed and the communications and retreat of the German armies would be so seriously threatened that surrender or envelopment could be their only end.

The Meuse-Argonne operation was, therefore, only one part of a gigantic offensive. But it had a particular significance. The safety of the German armies depended upon the holding of this left flank along the Meuse; and mainly upon the success of French and American efforts on this front the issue would hang.

The reduction of the St. Mihiel salient by the American 1st army had given a broader and safer base for the offensive about to be launched; but caution on the part of the army staff had led them to employ their best divisions in this battle, with the result that these divisions were not available for the opening of the great offensive. There was insufficient time after the capture of St. Mihiel to transfer them to the west of Verdun, and in consequence their places in the front line were filled by new, and, in some cases, completely inexperienced, divisions. Secondly, again owing to lack of time, the young American staff which was not yet working quite smoothly was unable to make the adequate survey and preparations which such a huge offensive demanded. Inevitable friction, breakdown and delay occurred, and the speedy results which were hoped for did not materialize.

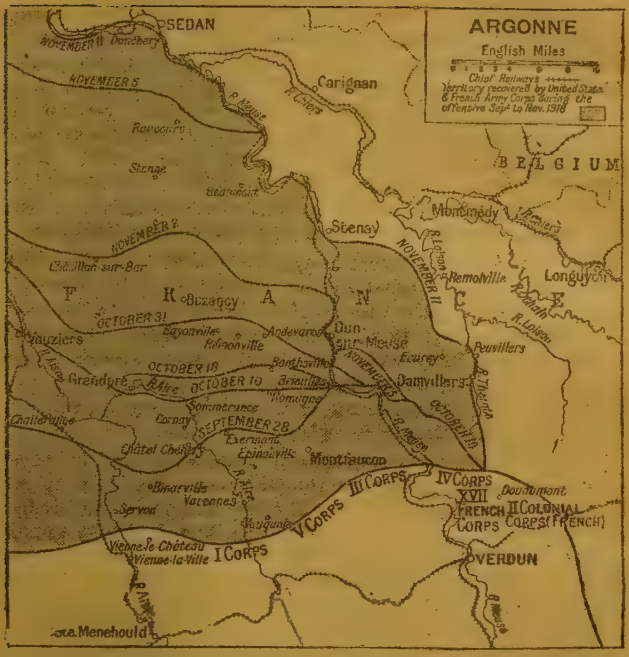
So irritating did these delays become at one critical juncture that both the French government and Marshal Foch himself were constrained to urge that the Americans should accept a French general and staff for the continuance of the struggle. But General Pershing rejected the proposal on the ground that American honour was engaged, and insisted that whatever the outcome the responsibility must rest on American shoulders. It must be remembered, however, that Pershing and Gouraud, the general in command of the French 4th army operation, which was to act in conjunction with and on the left of the Americans, were pitted against what was probably the most heavily fortified sector of the Hindenburg line, and against the greatest bulk of German troops.

So concerned did Marshal Hindenburg become for his left flank that no fewer than 42 divisions were thrown in to reinforce the five which originally defended that part of the German line. These 47 divisions constituted one fourth of the German strength, and, in conjunction with the terrible country over which the advance was made, go far to account for the delays which from time to time held up the American attack. The section of the line from Reims to Verdun was possibly the most war-scarred of any in the whole 400-mile front. High-explosive shells had battered the shape of the country out of recognition, while mustard and phosgene gases had destroyed every vestige of plant life.

Gouraud's area of operations extended from Reims to La Harazee in the middle of the Argonne forest. Pershing's extended from La Harazee, across the Meuse to Clemery, south of St. Mihiel. But the effective point was the Argonne and the country immediately on either side. The real weight of the attack would fall on the sector between Reims and the Meuse.

The Argonne itself was impregnable to frontal attack. Tanks, cavalry and aeroplanes were all useless in its thick undergrowth, and artillery had no field of fire. Fortified with all the latest and most terrible devices of modern science, the German line in the forest was impervious to unsupported infantry attack. But this position was to be the key of the whole battle.

Some ten miles north of the Franco-American assembly trenches the great wooded backbone of the Argonne was cut into a defile by the swerving water of the Aire river, as it made a sudden turn westward to join the Aisne above Vouziers.



Through the defile at Grandpré there ran a good road and a railway, which branched westward and fed the German line from the western side of the Argonne to Craonne. This line, with its connexions with Vouziers and the upper Aisne valley, was the shuttle by which strong German forces had moved eastward and westward for four years.

The enemy's artillery prevented traffic along the Verdun road running across the Argonne forest, with the result that the long, high hog's-back divided the Allied forces while uniting the German armies. If, however, the Aire cutting were reached at Grandpré, the army groups of the Prussian crown prince and General von Gallwitz would in turn be divided by the northern prolongation of the wooded ridge, while the Allies would have free connexion along the Verdun and Ste. Ménehould highway as

well as along the Grandpré line. Marshal Foch's aim was to transform the formidable ridge of the Argonne forest from an obstacle to the Allies into a grand embarrassment for the enemy. On account of the difficulties confronting direct attack it was decided that the forest should be enveloped. French and Americans were to attack on its left and right respectively, while little pressure would be exercised in the forest itself. If the Germans who were defending it did not retire, they would be in danger of envelopment. If they retired to avoid that danger, then Allied troops could follow their retreat and occupy the forest.

Secrecy and speed were the keynotes of the attack. Some delay and confusion arose in the attempt to hurry American divisions from St. Mihiel to west of the Meuse; but by the morning of September 25, 10 American divisions were in line, while 12 were forming in reserve. In aggregate they numbered some 750,000 effectives, although barely half was employed at any one time. To support the infantry, over 1,000 heavy guns, some 300 tanks and a great fleet of aeroplanes were collected.

The French 4th army was already in position, and for over a month had been preparing for the offensive. The masterly staff of General Pétain had worked out every detail of both artillery and infantry work on the field. The American staff fully profited by all information furnished to it, and when, in the evening of September 25, 1918, there opened a bombardment heralding the general offensive of the Allies, the precision as well as the volume of the gun fire was incomparable.

From the forts of Reims to the forts of Metz the bombardment extended, and for 11 hours the armies under the crown prince of Prussia and under General von Gallwitz were hammered by guns and howitzers of every calibre, the most intense fire being at first thrown on the enemy's flanks. American gunners east of the Meuse played an important part in the affair by bombarding all the approaches to Briey and Metz in a manner indicating that infantry operations were about to begin. Consequently, the German staff could only guess at the sections between the Aisne and the Moselle where the infantry thrust would be made. While preparing against an attack by Gouraud the German high command miscalculated the direction of the American assault, and, apparently thinking that Pershing would try to develop his first victory and drive at the Hindenburg defences in front of Metz, it neglected to reinforce the more critical Meuse sector.

The German divisions in reserve were held around the Briey mine-fields, where no attack took place, and some of the Prussian Guard were sent towards the Argonne forest, which was not directly assailed. The main American objective was Montfaucon hill, rising some 1,200 feet, between the Meuse and the Aire rivers, and completely dominating the rolling ground west of Verdun. The enemy possessed some five miles of fortified territory south of Montfaucon, his line running above Regnéville, and along the Forges brook by Dead Man hill and Hill 305, and enclosing Bethincourt and Malancourt. It then stretched across the Argonne forest, which was a hog's-back, from 800 to 900 feet high, running for 25 miles north and south and forming a battle position of mined, wired and pitted brushwood, four miles broad, dividing the American and French forces of attack. The Prussian Guard was entrenched in the forest at Varennes and by Vauquois, on the side where the wooded upland broke into numerous low spurs. Four zones of defensive works faced the American divisions. First was the front Hindenburg line, then came the Hagen line, and behind these were the Volker line, and last the Kriemhilde.

At half-past five o'clock in the morning of September 26, 1918, the American infantry went out under their barrage. A dense mist covered the country and made the dark autumnal morning blacker, so that it was a matter of great difficulty for troops inexperienced in groping actions of the latest kind to keep all their intricate directions. The enemy's attempt at a counter-battery duel was of short duration, and while his artillery was temporarily put out of action by the Verdun batteries, the way was cleared for the American infantry to advance on the other side of the river.

The American gunners used an enormous number of gas-shells in counter-battery work, and the infantry advance began well. On a front of some 20 miles the Americans worked forward. The natural mist served the same purpose as an artificial smoke-screen, and the sappers were able in the foggy darkness to throw some light bridges over the Forges marshes, enabling a Chicago brigade to emerge with surprising effect against a weakly held part of the hostile line. Near the Meuse the brigade turned Forges by a surprise movement, overcame the machine gun redoubts in the wood behind the stream, swept through Gercourt, and, after fierce fighting, captured Dannevoux.

West of this scene of action Bethincourt and Malancourt were overrun in half an hour; but when these forward positions were captured the difficulties of attack greatly increased. On the left was Montfaucon Wood, filled with machine guns, with Montfaucon crest rising above through the sea of mist, and girdled by a fourfold series of entrenchments. From the right, at Dannevoux and Septsarges, Montfaucon was outflanked, but the encircling movement could not be completed from the left. The American field guns could not follow the infantry as the ground had been ploughed into chaos by years of artillery and trench mortar fire between Hesse and Montfaucon Woods. Only the long-range American guns could immediately assist in the struggle for the high pivot point in the German front.

Although these guns blew Montfaucon village to pieces and excavated the rocky hillside, they could not reach the numerous machine guns placed under concrete cover on the slopes. The principal American attack was made from the south-east, and it was held up until the field guns laboriously worked forward in the morning of September 27. Then, when the 75's were able to get into action, the infantry quickly worked half round the great hill and carried the position in a magnificent rush.

On the outskirts of the Argonne forest the enemy held his first positions lightly, and the old horrible field of struggle by Vauquois was easily wrested from the Prussian Guards. Varennes was also captured early in the morning, when the enemy's artillery fire slackened as he moved his pieces back. But the Prussian Guards were workmanlike in their retreat, and by blowing up the bridges at Varennes and Cheppy prevented the American field artillery from following the infantry in support. Meanwhile, in the valley of the Aire, they held the American troops up at Montblainville in a machine gun duel lasting through the day. By Montblainville the Volker line ran to Montfaucon. The Germans were still holding, by cross-firing machine guns, to this line.

During the night the engineers of the American army built trestle bridges over the Aire and its tributary stream, and by desperate work under shell fire and aerial bombardment got the guns over on the following morning. As a result, in the afternoon of September 27, Charpentry was taken, and with the fog still acting as a smoke-screen, the many-caverned and double-trenched Volker line was carried at the point of the bayonet,

with the villages of Eclisfontaine, Epinonville and Ivoiry beyond. At Nantillois, two miles north of Montfaucon hill, the Americans were more than seven and a half miles from their starting-point.

In the simultaneous French offensive General Gouraud was faced by grave difficulties. The German high command had prepared a strong resistance, and had adopted the attacking commander's method of defence. The main German forces were drawn back for some miles to the Py and Dormoise streams, and forlorn hopes of machine gunners were placed in concreted works on the slopes of all intervening downs, so as to bring crossing fires to bear upon every way of approach.

As General Gouraud was acquainted with the enemy's new dispositions, he used a new method of attack. His terrific opening bombardment in the foggy night of September 25 was directed almost entirely upon the German reserve lines, while the trenches and gun-pits by the Py and Dormoise were inundated with poison gas on a front of some 22 miles.

Then, in the darkness of early morning, with fog hanging thickly on the rolling, broken wastes of chalk and splintered pine woods, the French infantry worked forward in scattered groups. One by one the redoubts were reduced between the Suippe river and the western edge of the Argonne forest by Servon. The historic line of the buttes, or downs, over which the war had continually rolled since September, 1914, was finally reduced, Tahure hill, maintaining the longest, fiercest resistance, being taken, lost and retaken.

By nightfall General Gouraud recovered the heights west of the Suippe stream, which he had abandoned three months before, and also won new ground where no free French soldier had stood since August, 1914. By the Argonne, a division of dismounted cavalry took Servon—a village on the upper Aisne, that had been unconquerable in all other French offensives. The battered Hand of Massiges was carried, with Naverin hill, near the Suippe stream.

Against the difficult tangle of the Moronvilliers hills, which the enemy expected to be the principal object of attack by reason of the observation value of the dominating heights, General Gouraud made only a demonstration. The real direction of his attack, together with the line of advance of the American army, seems to have been a complete surprise to the German high command, and the French thrust had reached five miles into the

most vital part of their defences. In the upper reaches of the Aisne, the village and wood of Cernay were taken by the French dismounted cavalry, giving a line of approach to the heights dominating the upper course of the Aisne and the vital railway junction at Challerange, near the Grandpré defile. The great fortress systems excavated on the hillsides near Gratreuil and Fontaine-en-Dormois were carried in very bitter but loose fighting. The dismounted cavalry that began by manœuvring into the Servon swamps continued, day and night, to work down the Aisne, advancing towards Mont Cuvelet and Bellevue hill by numerous little local penetrations. While the heavy French guns were being hauled forward slowly over the chalk wastes a swarm of aeroplanes served directly as aerial artillery, dropping in a single day some 25 tons of bombs upon the German reserve positions by the half broken railway.

By September 28, however, it was clear that both the American and French armies had reached the limit of their push. The huge advance of the first day made by the Americans had never been repeated, and only small and local gains had been recorded since then. The line ran roughly from Appremont on the eastern edge of the Argonne, to south of Brieulles on the west bank of the Meuse, and then down the river to Samogneux. Commissariat difficulties had been growing daily more acute, and the transport of supplies and guns across the mass of craters, the result of four years of warfare, had taxed the resources of the engineers beyond their limits. A halt was imperative.

General Gouraud, although his initial advance had been less spectacular, had encountered stiffer opposition, and he, too, was compelled to stay for reorganization. The high hopes raised by the success of the beginning of this Meuse-Argonne offensive were disappointed. The delay gave time to Hindenburg to throw in a great number of reserve divisions, and the chances of a sudden and brilliant break through to Sedan became even more remote. Much had been accomplished, including the capture of some 20,000 prisoners and many guns; but the German line was still intact and still capable of a prolonged defence.

For five or six days great activity prevailed. Roads and light railways were rapidly built across the former No Man's Land, guns, stores and ammunition were moved forward, and weary troops were replaced by fresh divisions. In order to assist General Gouraud two American divisions, the 2nd and 36th,

were loaned to him by General Pershing, particularly to reduce the German fortress of Mont Blanc, which was holding up his advance. Six hundred feet high, this position gave an uninterrupted view over a great stretch of country to the north. Its capture would threaten an enveloping movement against the Moronvilliers system eastward. Its centre was a hill crowned by a farm and covered with machine gun nests. The position was one of great strength and seriously delayed Gouraud's advance.

On October 3 General Gouraud resumed his offensive, and the 2nd division, fighting with magnificent dash, pushed towards Mont Blanc. Directly in front of his right the Germans under von Einem retained their ground, and on the east side of the Argonne General von der Marwitz still fronted General Pershing, who resumed his attack the next day.

There was a fierce battle in Champagne, where the American 2nd division, serving under Gouraud, broke the enemy's line above Somme-Py, and in an advance of two and a half miles through strongly fortressed ground, reached Mont Blanc and the hill crowned by Medéah farm. One company, with the help of French volunteers, stormed a machine gun fort on Mont Blanc, taking nearly 300 Germans with 75 machine guns and trench mortars, without a single casualty. The fortress itself fell to the troops who first came into action by Belleau Wood.

On their right French troops attacked through Orfeuil and the second battle position of General von Einem, making the conquest of the Grandpré defile assured. The German commander replied by massing the fire of his guns on the railway junction; but the entrance to the large gap of the Argonne forest was completely commanded. On the left, by Ste. Marie on the Py stream, the upland of Notre Dame des Champs with its successive roads of concrete works was turned from the north on the line the Americans had reached. As the Germans began to waver under this attack from their rear, a thrust was made through them to a depth of five miles as far as the valley of the Arnes river, where Ste. Etienne and Autry were taken. Counter-attacks were launched at Mont Blanc. But Americans and French resisted all attempts to dislodge them, and once more began their advance.

The blow struck by General Gouraud shattered the left battle position of General von Einem between Béthenville and St. Etienne, on the Arne river. As the old German army of

Champagne rolled back it left nearly seven miles of the right flank of General von Mudra's army exposed. At the same time the left flank of Mudra's forces was seriously endangered by the thrust which General Berthelot had made with French and American divisions of the French 5th army against Eberhardt's advanced positions along the Vesle river. General von Mudra was beaten without a struggle, and on a front of nearly 30 miles he retired from the salient which had been formed around him at Reims.

The ground from which he retired was of enormous strength. Much of it had been held by the German armies since 1914, and General von Mudra, who was a skilful and resourceful sapper officer, had spent months of patient effort on turning his position into an impregnable line of fortifications. All his work went for nothing, and, angrily setting fire to Brimont, Nogent and the hamlets in the valley of the Suippe, he drew his army back on October 5, with French cavalry patrols pressing and rounding up his rearguards and taking some of his fortifications at the gallop. The French 4th army broke the Suippe line at Bétheniville, and by October 6 the French advance guards were beginning to trickle through the mass of pine woods towards the Retourne.

Then, however, the elastic scheme of defence which General von Mudra and General von Einem were following was abruptly changed to a continuous desperate struggle for every yard of ground. The German high command had intervened at the moment when the Prussian crown prince was abandoning Mezières as army group headquarters and moving to Spa. The original intention had been to withdraw to the last Hindenburg line along the Upper Aisne, but the terrible success of the British in the west forced the Germans to cling desperately to their eastern line of communications through Sedan and Metz, and the result was to stiffen the whole resistance of the German armies facing Gouraud and Pershing.

On the other side of the Argonne the Americans had also won considerable success. On October 4, between the Aire and the Meuse, fresh American forces made an attack on the Kriemhilde line from Apremont in the Argonne to Brieulles on the Meuse. The tanks that preceded the infantry climbed up Exermont hill and into Gesnes, Fléville, and other fortified villages, but were held up in the woods through which the main position ran.

Fierce counter-attacks, gas attacks, and the terrible nature of the ground combined to slow up the advance. In the forest itself desperate attempts were made to break the German line. At one point they were successful, a force under Major Charles Whittlesy breaking through to Charlevaux mill, a distance of nearly two miles. The Germans closed the gap, and the Americans were trapped. In spite of all the efforts of the 77th division no further break could be made. But the trapped battalion would not surrender. For nearly four days they maintained a stubborn resistance, and when at last the division broke through on October 7, they were found, terribly exhausted and many of them wounded, but still undaunted. Elsewhere, by the evening of the 5th the American army had met with stubborn opposition, and had been brought to a standstill between the Meuse river and the upper end of the Argonne forest.

In spite of the great number of men and guns that Pershing employed, he was for some time unable to achieve a success at all comparable with that of Gouraud's army on his left. But on October 7 he won an important position along the eastern edge of the Argonne by Chatel Chéhéry. Under cover of a mist his troops crossed the Aire at dawn, and against heavy machine gun fire charged up the hills, on the crest of which the Germans made a desperate struggle. There were long and bitter, but successful, actions on the hill-tops, and at the end of the day the American forces had made an important step towards the complete envelopment of the wooded ridge by reaching almost to the north-eastern corner of the Argonne forest at Cornay.

This new success had been brought about largely by the results of an offensive which had been launched on the east bank of the Meuse. As the American advance had continued, it became clear that until the Germans on the left bank of the river had been driven back no real success could be achieved. From their position they were able to threaten communications and the rear. Accordingly, Pétain had placed at the disposal of Pershing the French 17th corps holding the line east of the Meuse. Two or three American divisions were ordered to cooperate across the river while the French attacked from the south. The operation was begun on October 7.

When the Franco-American attack, under General Hirschauer, was delivered under combined frontal and flanking fire, the Austrian and German divisions holding Caures Wood, Haumont

Wood and Consenvoye, Brabant, Haumont and Beaumont villages were rapidly overrun and surrounded, with a gain in prisoners alone of 3,000 men. The French attacked in front and the Americans in the flank; but the strength with which the enemy had organized his endangered positions was too great to yield to sudden pressure, and although an advance of 14 miles was made, not all the objectives were reached. The threat, however, was sufficient. The German commander was compelled to detach considerable forces for defensive purposes north of Verdun. Thereupon, General Pershing and General Gouraud combined once more in a central action in and around the Argonne forest. General Gouraud made a thrust of some two miles across the Arne stream, and, again helped by United States troops, carried the high hill by Machault, with Lancon village and some important heights on the western side of the forest of the Argonne.

In the heart of the high forest and along the Aire river the American army made a magnificent final leap forward to the railway line at Marcq, driving the enemy from the northern end of the great upland, and arriving on the slope of the defile opposite Grandpré. By October 10, the forest of the Argonne was definitely conquered, 14 days after the opening of the great Franco-American offensive. Along the Grandpré valley the American 1st army and the French 4th army united into practically a single force. On the other hand, the army group of the Prussian crown prince and the army group of General von Gallwitz were divided by the large block of the upper Argonne between Vouziers and the neighbourhood of Sedan. Their railway communications ran in a large northern curve to a point just below Sedan, and the section east of the Meuse had to carry the traffic through Luxemburg, northern Lorraine, the Rhineland bases of Coblenz, and the neighbourhood of Mainz.

To keep the enemy apprehensive in regard to that vital section of his line east of the Meuse and compel him to concentrate strongly for its protection, General Hirschauer resumed his attack from Verdun on October 10. The German commander had been making strong but belated counter-attacks upon his lost positions, while the French and American gunners were hauling their pieces forward. At the end of two days a fresh bombardment heralded another assault, and an appreciable advance was made towards Sivry on the eastern bank. On the western bank

of the Meuse the American army, employing a tremendous weight of gun fire for 16 hours against the enemy's Kriemhilde line, broke into the northern part of Cunel Wood and battled its way towards Dun.

On the same day, October 10, the French 4th army completed another period of heavy, close fighting with General von Einem's army and the wing of General von Mudra's army by a deep advance to the last Hindenburg line along the bend of the upper Aisne. General Gouraud captured Vouziers, seven miles above the Grandpré defile, and some of his cavalry approached Attigny, from which the northern extension of the Argonne forest might have been turned.

The German commander, however, fought in strength for the wooded ridge above Grandpré. Still keeping the American army back along the Kriemhilde line (which was roughly on a level with Grandpré), he strongly garrisoned the Grandpré hills so as to form them into an upland salient along the right flank of the French 4th army. Thereupon, General Gouraud opened another attack against the flank of the German forces that held up the Americans.

General Pershing had all this time been steadily receiving new divisions. In order to better his organization and relieve his overworked staff, he split his command on October 12 into two armies, the 1st under Liggett, the 2nd under Bullard. The former was to continue its operations west of the Meuse, the latter was to take over the holding offensive east of the river.

On October 14 the 1st army renewed its offensive. In front of them was Châttillon crest, a steep hill 280 feet high, thickly covered with trees. The Americans went up and found themselves in an arc of machine gun forts, with showers of shrapnel playing upon them in addition to a sleet of bullets. The trees were all wired together, and the advance was held up until Stokes guns were brought up. The little English gun smashed the wire, and when the ground was cleared the Americans went forward. Most of the Germans fought their guns to the death.

In the meantime other American divisions worked round Romagne Wood through valleys covered by machine guns and artillery, and in spite of heavy losses stormed the village. Westward there was another terrible struggle for the town of Grandpré and the heights above it. But the gain in territory was small, and the enemy commander won time to make a new

line of trenches and linked shell holes, known as the Freya line. It ran near the northern part of the Argonne forest, above Grandpré to the Meuse, at a distance varying from two to six miles behind the Kriemhilde line. The original Hindenburg system, having been partially breached, was employed as an outpost machine gun screen, and the grinding battle went on with little immediate result.

By this time the French and American forces were exhausted by nearly three weeks' continuous fighting. Moreover, until the heavy guns had been brought up over the almost impassable ground, the German line was unbreachable. A halt had become necessary to enable the French and American commanders to carry out extensive reorganization and preparation. American staff troubles were again making themselves felt, particularly in the inexperienced staff of the 2nd army, and it was not until November 1 that Generals Gouraud and Pershing were ready to continue their great thrust.

The demoralization in the German army was by now frightful. On every front the troops broke and fled before the pressure of the Allied attack. Indiscipline, desertion and even mutiny were prevalent everywhere. Conditions on the Argonne front were, however, a little better. Moving appeals had been addressed to the troops holding that line, stating quite truly that upon their continued resistance depended the safety of the Fatherland from invasion, and that if they would hold out a few more weeks their sacrifices would not be in vain, as a favourable peace was being concluded. Reliable and firm staff officers were summoned to the region, and under their appeals and threats the wretched, exhausted and disorganized German troops found a new courage and a new resolution.

Until the launching of the final attack on November 1 there were only small and local operations upon this front. In the last week of October there were fierce local actions in the woods by Bantheville, where the American centre had been slowly pushed forward until the new Freya line became visible. In the Verdun sector there was a strong American advance on October 23 along the wooded heights by the Damvillers road, against which the enemy violently reacted, counter-attacking day and night until October 28, winning back some of the high ground and losing it again by a fresh local American advance. Towards the end of the month there were also fierce counter-charges against the

Bantheville positions, but in the night of October 29 General von der Marwitz suddenly abandoned Aincreville, Brieulles and Cléry-le-Petit, by the western bank of the Meuse near Dun. The next morning aerial observers saw large bodies of German troops and transport moving backward, and great explosions proclaimed that ammunition dumps were being sacrificed. The German commander knew what was impending, and, despairing of prolonging his defence, began to withdraw his main forces, leaving only a line of cross-firing machine guns in the Freya system and upon the remaining high ground that covered this new line.

The French and American guns opened fire at dawn on November 1. On a front of some 30 miles, from Attigny on the Aisne to the Dun bridge-head on the Meuse, an enormous number of shells fell upon the Germans. Then, as the heaviest guns concentrated on counter-battery work and the blockade of roads of communication, the other pieces formed the travelling barrage for the infantry.

From their dug-outs in the Bois des Loges the German machine gunners emerged and kept the American troops in check all day. This operation, however, was of small importance. In the centre and on the right wing, in spite of the flanking fire the enemy attempted to throw over the Meuse, decisive results were achieved. Hundreds of tanks went out with the infantry, and above the tanks and troops were swarms of low-flying aeroplanes. Many of the German machine gunners, hiding in pits covered with brushwood, were killed or crippled by the preliminary bombardment; and hundreds of the supporting groups of infantry, concealed in the wooded slopes behind the Freya line, were also caught by the shells. When the remnants re-formed for the counter-attack a travelling barrage fell upon them, and the light cars and waves of riflemen of the attacking force surged over them.

Here and there a few Germans holding isolated points made gallant attempts to check the sweeping American movement, but they were too few to do more than make a temporary delay. There were one or two brilliant bayonet charges by the Americans, but along most of the broken line the Germans found themselves being quickly enveloped and fled in disorder, enabling all the main objectives of the day to be passed. Buzancy, the enemy's railhead for the Kriemhilde and Freya lines, was carried, and the Americans were able to pass through the town.

At the close of the day General Hunter Liggett had created a wedge of some 80 square miles in the German front between the Bois des Loges and Dun. At Buzancy the Americans were practically on a level with the French position at Vouziers which General Gouraud's men had reached on October 12. The French commander had rapidly extended his line to Attigny, some nine miles above Vouziers, and by continual local actions had won a series of footholds along the western side of the Upper Ardennes hills. To a very considerable extent it was the fierce, constant pressure exercised by Gouraud upon the rear of Marwitz's army that opened the way for the American victory.

On October 20 the French 4th army had stormed across the Aisne to Terron and extended towards Les Alleux. From that point they were only five miles from the town of Le Chesne, on the Ardennes canal. Le Chesne was nearly 12 miles in the rear of Buzancy ; and at Châtillon, between Buzancy and Le Chesne, the upper Argonne forest ended in another defile through which ran a railway connnecting with Buzancy southward and with Le Chesne and Sedan and Mézières northward. Thus, for nearly a fortnight before the resumption of the combined Franco-American offensive, General Gouraud had broken General von der Marwitz's railway communications by medium range bombardment of Le Chesne. When the Americans in turn were able to train long-range guns upon the Mézières-Sedan-Montmédy railway line, on the eastern side of the Meuse, the difficulties of Marwitz became so serious that he was compelled to begin his retirement before the opening of the grand attack.

Against the French army of Champagne, General von Mudra and General von Einem combined with General von der Marwitz in resisting the attack. But the French forces were irresistible. In a hurricane bombardment of appalling power, sweeping all the upper Argonne woods and the approaches to Le Chesne, on a front of 12½ miles, the French attacked along the forest line while making drives at special points. On the wooded ridges east of Vouziers the French operations were only in the nature of violent demonstrations designed to help the American advance. The main attack was directed along the two ways of approach to Le Chesne—across the Aisne and along the Ardennes canal and over the Les Alleux upland.

The Germans still fought skilfully and courageously, collecting in the wooded hollows and counter-charging every wave of

attack. With great gusts of fire the French artillery cleared the ground by Neuville-et-Day, on the outskirts of the wood west of Le Chesne, and south of the town they curtained the edge of the Les Alleux tableland, while in wave after wave the troops of the assault moved forward. By the evening an advance of two miles was achieved, and after spending the night in prolonging their roads and throwing more bridges over the Aisne and Aire rivers, the French and American armies at dawn on November 2 began once more to move forward.

Their combined pressure was too great. Gouraud was sweeping up on the left; Liggett was thrusting forward on the right; while the American 2nd army, after crushing the resistance north of Verdun, was making a circling movement that would bring it in the rear of the German forces which by now were quite disorganized. The retreat became a rout, all organized opposition ceased, and only small groups of indomitable German machine gunners and artillerymen held up the advance, giving their lives in order to aid the escape of their comrades. The chief difficulty of the French and American commanders was in restraining their troops, and preventing them from advancing beyond the reach of supplies which were struggling slowly in their wake.

One after another easily defensible positions fell to the excited infantry. Of artillery or tank support there was but little, everything heavy being outdistanced in the wild race of victory. By November 7, Sedan had been reached, and the retreat of the German 5th army was cut off. In this rush forward, friendly rivalry amongst the various troops as to which should be the first to enter the recaptured towns was giving way to fierce competition, and whole divisions were performing prodigious marching feats in endeavours to outdistance their neighbours. Had there been any unity of command left in the German forces, the most serious checks could have been delivered to the exhausted Allied infantry, miles in advance of their supplies and guns. But nothing could now save the German forces.

There were a few more days of battle before the intervention of the armistice, on November 11, prevented the greatest military machine the world has ever known from crumbling into ruin. On November 8 the United States army completed its conquest of the heights of the Meuse: on Novmber 10 Pershing had reached Stenay; and his 2nd army had advanced through

the Woevre forest and had reached positions well beyond it. On the morning of November 11 the pursuit was still in progress. As far as the Americans were concerned there was no appearance in their ranks of any slackening of progress due to the anticipation of an order to "cease fire." It has, in fact, been said that the day opened with them "with all the accompaniments of a field action." Less, probably, than any other of the advancing armies were they inclined to check their successful progress.

From September 26 to November 11, during this Meuse-Argonne campaign, the Americans engaged, in actual contact with the enemy, forces amounting to 600,000 men. Of these their casualties reached a total of one third. At the date of the armistice 82,000 American officers and 2,071,463 men were in Europe. A further 1,634,499 officers and men were stationed in the United States. The total casualties of the American Expeditionary Force were 264,089. Of these, 35,556 were killed in action, 15,130 died of wounds, 24,786 died of disease. The wounded amounted to 179,625, the missing to 1,160. The Americans were fortunate in the number of their strength made prisoner of war, for these amounted to the comparatively light total of 2,163. A discrepancy in the addition of these figures with the total (264,089) is accounted for by death and injury from accidental causes.

In a time which must be accounted remarkably short as compared with the duration of the war, America had concentrated in a remarkable effort to place a very weighty and well-equipped army in the field. Without suffering the prolonged hardships of the Allies, as will be seen from these figures their losses were exceptionally severe; and America had reason, equally with her Allies, to be thankful when the armistice marked an end of the sufferings of her soldiers and the anxieties of her countrymen.

CHAPTER 18

Allenby Continues His Advance

THE great successes which had attended British arms in Palestine during the closing months of 1917 had done much to justify the view of those who maintained that the war was not being decided only on the western front. Culminating in the capture of Jerusalem and Jaffa, and the vigorous repulse of the desperate Turkish attempts to regain those places, Allenby's drive from Gaza northward had undoubtedly increased the war weariness.

British policy was therefore based upon the hope that if Turkey could only be given one more shattering blow, the discontent of her populace would change to open revolt against her German taskmasters, and Turkey would embrace eagerly a separate peace. Whether this hope was justified at this early date is a subject of great controversy. On the whole it would seem doubtful whether Turkey's war weariness was not more than counterbalanced by her confidence in the eventual success of German arms in France. Certainly this confidence acquired vigour as the outstanding successes of the German spring offensive in 1918 were recorded.

But the optimistic view prevailed. General Smuts of South and East African fame was dispatched to confer with the British generals in the Palestine and Mesopotamian theatres of war, and to report upon the conditions there obtaining. He telegraphed his opinions home on February 15. In his view, a "knock out" blow could best be struck at Turkey in Palestine, while the Mesopotamian force maintained an active defence. But in order that Allenby should make a successful advance to Damascus and Aleppo, short of which objectives no blow would be serious enough to produce the desired end, extensive reinforcements were necessary. A plan of advance was outlined, and the government accepted both the plan and the recommendations. A great offensive was apparently imminent; but it was destined to be postponed for many months. Far from being reinforced, Allenby's strength was to be seriously depleted.

The counter-attack by the British after the repulse of the Turkish attempts to retake Jerusalem had resulted in the gain of considerable ground. By January 1, 1918, the British at Bethel were about 12 miles north of the Holy City, held a string of villages on both sides of the important Shechem road, and had secured the ridge of Ram Allah commanding the cross-road leading by the Wadi el Kelb towards the sea. Allenby had, in fact, obtained the front which it had been his design to reach when the enemy began his attack. The British consolidated their new positions, and during January made an advance of a mile or more along the Shechem road in the vicinity of Durah, which itself lay between that road and a branch road leading to Gilgal.

A month passed on Allenby's front unmarked by operations of consequence. There were the usual patrol encounters and an occasional raid, as well as a certain amount of aerial activity, this being much circumscribed, however, by the bad weather, heavy rain or thick mists swathing the hills and uplands. Early in the year General Allenby returned to Cairo, where he was the guest of the sultan, and for the greater part of his journey he travelled by the new railway from Jerusalem to the capital of Egypt. Soon after the beginning of February the line was completed and in working order. This bridging of the desert of Sinai was, in its way, one of the most interesting developments of the Great War.

But more than the railway had to be completed before Allenby could continue his advance. Reinforcements from India had still to arrive, and enormous efforts at road making and the reorganization of the transport were necessary. The activities which had preceded the third battle of Gaza had to be reproduced. The long advance had carried the British many miles beyond their base, and until supplies had been brought up to their required complement, transport improved and effective preparations generally been made, any thought of advance was out of the question. Finally, the long overdue rains had set in with especial violence, and large tracts of the country had been rendered impassable. Allenby was hoping that by the beginning of May he would be once more in a position to strike.

On the Turkish side activities of a different sort prevailed. The terrible reverses which had been suffered had produced an atmosphere of gloom and disappointment. Falkenhayn's ability was questioned. In spite of the admirable command of the situation he had displayed, in spite of the excellent use he had made

of his inadequate resources, and in spite of his wise appreciation of the position, this able strategist was replaced by General Liman von Sanders, whose spectacular defence of the Dardanelles had attracted Turkish admiration.

Von Sanders was an able man, but there can be no doubt that his preference for rock-like resistance as opposed to Falkenhayn's subtler methods of strategy had more than a little to do with the final debacle. With Falkenhayn departed Kress von Kressenstein, the ablest of the junior German commanders. In spite of the esteem in which he had long and rightly been held and the admirable relations he had established with his Turkish colleagues, his failure at Beersheba had raised too many protests in the mind of the frightened and suspicious Turk to make it possible for him to continue. This change of command took place in the beginning of March, and it coincided with definite British reverses. Before those were suffered, however, Allenby had scored two further successes. He captured Jericho and seized several crossings on the Jordan.

His object in thus extending his right flank was twofold. In the first place he wished to secure the valley of the Jordan for his advance northward on Damascus; in the second place he was gradually feeling his way towards the Hejaz railway, that vital artery of Turkish communications, and stretching out his hand towards the Arabs, who under the Emir Feisal and Colonel Lawrence were conducting an admirable guerrilla warfare on the Turkish left flank. On January 26 they had inflicted a considerable defeat on the enemy on the Seil el Hessa, 11 miles north of Tafile, towards which town the Turks were moving a body of troops from El Kerak, the ancient Kir of Moab, about 20 miles north-east of the southern end of the Dead Sea.

In this battle the loss of the enemy was 400 killed, 300 prisoners, including the Turkish commander, two mountain guns, 18 machine guns, besides 800 rifles and 200 horses and mules. Significant of the growing cooperation of the British and the Arabs in this area was a successful air raid, carried out by Australian flying units on February 12, when over 1,000 lb. of bombs were dropped, 14 direct hits being observed on the station buildings, track, locomotives and rolling-stock at El Kutrani, on the Hejaz railway, 80 miles north of Maan. El Kutrani was the station for El Kerak, in whose neighbourhood the Arabs were operating.

As a preparation for his advance east of Jerusalem, Allenby on February 14 moved his line forward on a front of six miles, to an average depth of two miles, on either side of the village of Mukhmas, in the hill country about 12 miles north-east of the city, and met with little opposition. The Turkish left wing, which covered Jericho, went from about Mukhmas south-easterly to the Dead Sea, Mukhmas itself lying 10 miles north-west of Jericho, and being connected with it by a mountain road. During the night of February 18-19 a column marched from Mukhmas, and, after a struggle, took by nine o'clock in the morning Ras et Tawil, a height dominating a wide district. Immediately east of Jerusalem the British front ran from Anata and Ras Arkub es Suffa across the Jericho road south-westerly to Abu Dis, its length being about 12 miles.

At dawn on the 19th Allenby's forces began the main attack—on this occasion they consisted of the 60th and 53rd divisions, the Anzac mounted division less one brigade, and the divisional artillery—and before evening all the objectives selected had been secured to a depth of two miles, despite the immense difficulties of the terrain. El Muntar, a bleak hill over 1,700 feet high on the south-east, was soon taken; on the north Irak Ibrahim, a couple of miles above the Jericho road, was stormed. Along the road itself and on the high ground running eastward, where the resistance of the Turks was very determined, the advance progressed, but more slowly, yet the whole Turkish line was in the hands of the British by three o'clock in the afternoon.

Allenby continued his advance next day, though, in addition to the negotiation of the difficult terrain, the troops were retarded by heavy rainstorms. During the night the column on the south had moved forward to the long ridge at whose northern end lay Talat ed Dumm, the key to Jericho, with the highway winding up and over the hill known to the Arabs as the Hill of Blood, and showing the remains of an old castle of the Crusaders. As day broke, the hill, which was well fortified, was vigorously shelled, and then it was assailed by the Londoners. Before their assaults the Turks fell back, but, re-forming, attempted a counter-attack, which was beaten off by the British, who were masters of the hill by eight o'clock that morning. The southern edge of the ridge was formed by the huge mass of the Jebel Ektief, from the side of whose precipitous face branched great spurs, with deep ravines in between.

A dispatch-carrier delivering a message in a mountain trench on the Piave. In the summer of 1918 the Italians drove the enemy back across the river on the whole of the Piave front.

Patrol passing through barbed-wire entanglements destroyed by artillery fire The men carried sticks to help them on the rough road.

VICTORIOUS ITALIANS IN THEIR ROCKY RAMPARTS

H.M.S. SEDGEFLY IN ACTION ON THE TIGRIS, MESOPOTAMIA, IN 1918

From El Muntar detachments had marched towards this formidable position, which the Turks held in considerable strength, with numbers of machine guns skilfully sited. The British carried the first line of trenches with a rush, and after a period of severe fighting, Ektief passed to the attackers in the afternoon. North of the Jericho road the Turks made a stubborn stand near Ras et Tawil, but were driven on eastward. On the evening of February 20 the 60th division had reached a line four miles west of the cliffs overlooking Jericho.

In the meantime the mounted Anzacs had been working south of the infantry in a turning movement eastwards, their intention being to dislodge the enemy from a strong point called Neby Musa, and striking up into the Jordan valley, take him in the rear. Two miles south of Neby Musa, which was situated near the Dead Sea, the Turks had entrenched some high ground, the approaches to which were so narrow that the mounted men had to move in single file to attack it. The Turks, who had the range accurately, shelled the Anzacs in these defiles and materially delayed their advance, but by two o'clock in the afternoon of the 20th the position was carried. The further advance of the New Zealand brigade, which was greatly hampered by the difficult terrain, was checked at a wadi in front of Neby Musa. South of the New Zealanders, however, an Australian mounted brigade discovered a crossing over another wadi, and towards dusk reached the Wadi Jufet Zeben in the Jordan plain. During the night the Turks evacuated Jericho, and early in the morning of February 21 it was entered by the Australians.

While these operations were being undertaken by the 20th corps in the east, the 21st corps in the coastal plain was carrying out an equally successful attack north of Nahr el Auja. Not only had this attack prevented the withdrawal of Turkish troops to aid in the battles which were fought in the east, but it had also resulted in the gaining of ground which, tactically, was very valuable. The whole of the British front in that area was advanced and strongly positioned. The lines, which were to remain unchanged throughout the summer, had been established by March 10. But before that date further advance had been made in the east. On February 21 the Australians marched on from Jericho and established themselves on the line of the Jordan and its tributary, the Wadi el Auja (not to be confounded with the Nahr el Auja, previously mentioned).

The capture of Jericho was a gain of considerable strategic importance. Allenby's right flank was safeguarded, and it was open to him now to advance northward by the Jordan valley road, as well as by the Shechem road in the centre and the road along the coast. As the junction of several roads, the town had been an advanced Turkish base and a supply depot. From it and the Jordan Allenby's threat to the Hejaz railway became more pronounced.

In early Biblical times the strategic importance of Jericho lay in the fact that it stood at the entrance to the passes of Palestine from the Jordan valley. The Israelites under Joshua invaded the Promised Land from Jericho, whose walls, according to the Bible narrative, fell down at the sound of trumpets. The place itself was destroyed and laid under a curse. Some 600 years elapsed before it was rebuilt in the days of Ahab by Hiel, the Bethelite, who laid the foundation with the loss of Abiram his first-born, and set up its gates with the loss of his youngest son Segub, as Joshua had spoken (1 Kings xvi 34). Afterwards Jericho figured more or less frequently in history, and in the time of Christ was a flourishing city. Herod erected large buildings, and it continued to be a place of importance till the Jewish wars, in the course of which it was ruined and left a desolation. In the first Christian centuries it was regarded as a semi-sacred spot, probably because a neighbouring hill was supposed to be the scene of the Temptation, and as such was visited by pilgrims, who found in it some anchorites and monks. When the Crusaders occupied it several monasteries were established there.

The modern Jericho, a mere village, lay a short distance from the site of the ancient city. In the days of Christ Jericho was a beautiful place, surrounded with gardens, and with such an abundance of palms that it was known as the City of Palms; but that even then the road from it to Jerusalem had an evil reputation, on account of the difficult country with its facilities for concealment, was shown in the parable of the Good Samaritan and the man who fell among robbers. Doubtless they sprang on him from their hidden dens in the rocky defiles. Of this rugged region Sir Edmund Allenby wrote:

> On no previous occasion had such difficulties of ground been encountered. As an instance of this, a field artillery battery took 36 hours to reach Neby Musa, the distance covered, as the crow flies, being only eight miles.

While his right flank was secured, General Allenby had still to obtain a base sufficiently broad to permit of operations being carried out east of the Jordan against the Hejaz railway. This involved taking the high ground which covered the approaches to the Jordan by the road leading from Jericho towards Beisan, as well as the high ground farther west, that stretched across the Mount Ephraim range south of Sinjil, and thence in a north-westerly direction, the length of this front being about 26 miles. Here again the terrain was one of great natural difficulty—a succession of high and rocky ridges, many with precipitous sides, separated by deep valleys, the whole affording a series of positions of immense strength to the defence. By March 3 the British had advanced their line north of Jerusalem till their front was nearly halfway between the city and Shechem. After a week of preparation Allenby launched his new attack on March 9.

In the course of the night the Londoners crossed the Wadi el Auja, north of Jericho, and on the morning of the 9th seized a position astride the road to Beisan. They encountered strong opposition in occupying Abu Tellul and Beiyudat, and as they advanced across the broken country they had to face heavy fire from the east side of the Jordan; but they gained their objectives, and commanded the ford across the Jordan near the mouth of the Auja. Meanwhile, larger operations had been going on to the west, where the 53rd and other divisions were engaged, the scene of the fighting being the Shechem road and the districts on both sides of it.

On the west side of the road, the centre of the struggle was Tell Asur, a hill 3,318 feet high, and the most commanding position in Palestine. The Turks had entrenched it to the summit and lined it with machine guns; their defence was resolute in the extreme, and for many hours the British were hung up. But an irresistible charge by the Middlesex finally gained the top of the hill, and the Turks were forced from their positions. The enemy tried repeatedly, but in vain, to recover this dominating ridge. On the extreme left, west of the Shechem road, the Turks counter-attacked the 10th division in the deep vales of the Wadis el Nimr and el Jib, and the hill itself was repeatedly assailed. All the attacks were beaten off, and the British retained their hold on the ground they had won.

During the night of March 9 and throughout the following day the northward march of the British continued astride the

Shechem road, progress being made to a depth of about 3,000 yards on a front of 12 miles. The fighting in and about the pass to Shechem was savage. Commanded by heights east and west, the road descended to the Wadi el Haramiyeh—the "Robbers' Valley," shut in by steep hills, partly covered with olive trees and traversed by the bed of the torrent leading to the "Robbers' Spring." Such a locality gave ample scope for hiding machine gun nests. Allenby, in a communiqué at the time, observed that the advance went on "in the face of obstinate resistance, the enemy employing numerous machine guns from concealed positions."

It appeared as though Allenby were beginning a new offensive along the whole of his line. But this was not the fact. His main purpose was a raid in some force on the Hejaz railway in conjunction with the Arabs on the east. Allenby's operations had been designed to clear his front in order that such a raid could be carried out. They had succeeded, and he began to make his preparations. His objective was Amman (Rabboth Amon), lying in a direct line some 30 miles east of Jericho, or about 25 miles beyond the Jordan, in the Bible land of Gilead.

Early in March the success of the Arabs in raiding the railway and wiping out isolated Turkish posts had so irritated the German command that a strong force had been dispatched south towards Maan both to curb Arab activities and to protect that vital depot. At Shobek the Arabs had been severely handled, but this reverse had not quenched their ardour or seriously limited their attacks on the railway. The Turkish force had therefore to remain at Maan. Allenby, by striking at Amman, was hoping to achieve one or more of three possible results. If the Turks remained at Maan his advance to Amman would be by so much the less resisted. He should, therefore, be able to seize the station and cut off the Turks in the south. If, however, they retired in order to resist his attack on Amman, then the Arabs should be able to occupy Maan. In any event, by careful cooperation it might be possible for the two forces to make contact, and for the first time link up Allenby's main force with Allenby's right wing, as the Arab army eventually was named.

None of these expectations was wholly realized. The raid into Transjordania was begun on March 21 by sections of the 20th corps assisted by part of the desert mounted corps. But the Turks made surprisingly strong resistance, and a whole day was

spent in forcing the passage of the river. This delay was to prove serious eventually, but for the moment the troops pushed on. Difficult country and terrible weather further delayed the advance, and it was not until the evening of March 25 that Es Salt, to the north and west of Amman, was occupied. Everywhere the advance had been slow and painful, the Turks defending themselves with great courage. The railway north and south of Amman was finally reached by several patrols, and a number of culverts and several lengths of track were destroyed. But Amman itself proved invulnerable. In spite of heavy artillery bombardment and exemplary bravery among the British attacks, the Turks beat off attack after attack. By April 1 it was clear the raid had failed. Enemy reinforcements were pouring up and, from the north, seriously threatening the communications of the raiding force. Retreat was imperative, so Major General Shea, in command of the operations, ordered a withdrawal. By April 2 the British troops were back in the Jordan valley.

The disappointment was felt keenly by the British, and the Turks were correspondingly elated. In particular it was a happy augury for von Sanders. But the repulse at Amman was not a serious reverse, and although the raid had achieved little, the Turks had no cause for jubilation. Weather, difficult country, and the 24 hours' delay in crossing the Jordan had been the main factors in the failure. But great credit must be given to a German battalion of the Asia corps, which fought with admirable determination. By its steadiness, bravery and discipline it did much to hold up the British advance, and provided a strong backbone on which the heterogeneous Turkish forces rallied.

A few days later two sister battalions of the one which had acquitted itself so well at Amman were to show a similar spirit on the coast. On April 9 Allenby planned a surprise advance on his extreme left, to be carried out with the assistance of warships off the coast. But the Turks were well prepared, and after two days of desperate fighting the British attack was repulsed. The stubborn defence had been materially assisted by the two crack German battalions. The presence of these trained soldiers and the example of steadiness they set had stimulated the Turks to a display of fighting power which they never surpassed.

The raid on Amman, for all its ill success, had at least succeeded in helping the Arabs in the south to maintain their position, and they had recorded some successes near Tafileh. To

THE CAMPAIGNS IN PALESTINE

Map showing the chief cities and ports of the country finally conquered by the British in 1918. Included in it are Syria and Transjordania, also the scenes of Allied triumphs in that year

aid their operations Allenby made a parade of force over the Jordan. But here again the Turks were found to be on their guard, and, stimulated by their recent successes, turned from defence to attack. The British forces were driven in, and for some time had to fight fiercely to maintain the vital bridge-heads. A strong force of Turks was able, by this success, to establish itself at Shunet Nimrin, some few miles east of the Jordan bridge-head at El Ghoraniyeh.

Further successes of the Arabs made it appear possible that a union could be effected, for they were across the railway north of Maan and within striking distance of Es Salt. The threat which had been made over the river became an earnest attack.

General Allenby determined to destroy the enemy force at Shunet Nimrin and to reoccupy Es Salt until his men could be relieved by the Arabs. His intention was strengthened by representations from the Beni Sakhr tribe which induced him to strike a fortnight sooner than he had originally planned, and the operation was begun early on April 30. The 60th division were to attack Shunet Nimrin, while mounted troops, having first moved northwards, were to make a flanking attack south on Es Salt, and cut off the Turks at the former place. Part of the scheme was that the mounted division was to leave a force to protect the crossing of the Jordan at Jisr ed Damieh, about 18 miles north of the Ghoraniyeh bridge-head. The Turks held the west bank at Jisr ed Damieh. General Allenby, in his dispatch of September 18, thus described what took place:

> The 60th division captured the advanced works of the Shunet Nimrin position, but were unable to make further progress in face of the stubborn opposition offered by the enemy. The mounted troops moving northwards rode round the right of the Shunet Nimrin position, and by six p.m. had captured Es Salt, leaving an Australian brigade to watch the left flank. This brigade took up a position facing north-west astride the Jisr ed Damieh-Es Salt track. . . . At 7.30 a.m. on May 1 this brigade was attacked by the 3rd Turkish cavalry division and a part of the 24th division, which had crossed from the west bank of the Jordan during the night at Jisr ed Damieh. The enemy succeeded in penetrating between the left of the brigade and the detachment on the bank of the Jordan. The brigade was driven back through the foot-hills. During the retirement through the hills, nine guns and part of its transport had to be abandoned, being unable to traverse the intricate ground.

It may be added that the assistance of the Beni Sakhr tribe never materialized, and that the infantry in the south were unable to take Shunet Nimrin. What had been a deadlock on May 1 became a serious position on May 3. The British in Es Salt were almost surrounded, and only the most desperate fighting, not only by them but also by the troops to the west and the south, enabled them to withdraw. It was clear that this raid, too, had failed, and a general retirement was ordered. This was successfully accomplished, the whole force getting over the Jordan with little loss by midnight on May 4.

This third reverse falling so rapidly after the two former setbacks was disappointing in the extreme. It is true that the results of the failures had in no way prejudiced the position of the British and done nothing to improve that of the Turks; but the effect upon the morale of the two bodies of opposing troops was considerable, the Turks particularly profiting from the access of prestige they acquired. Among the native population, especially with the Arabs, the effects were to be felt throughout the summer. The immediate result of these failures was that Lawrence, who was leading his Arabs towards Es Salt, had to turn back. But the preoccupation of the Turks with the Jordan valley, which appeared to them to have become the main theatre of British operations, undoubtedly relieved the hostile pressure in the south, and the Arab attacks on the railway at Maan were pushed with growing success.

Ghadir el Hajj, the station next south of Maan, had been captured on April 11, and two days later Jerdun, north of Maan, also fell to the Arabs. Maan was cut off, and eventually captured on the 17th; but the Arabs were driven out again, although Maan was still beleaguered, the garrison being in desperate straits. Farther south other successes were recorded, Tell esh Shahin station falling to Lieutenant Colonel Dawnay and his Arabs on the 20th. Much damage was done to the railway, and the position of the Turks in the far south-east at Medina became hourly more precarious. In fact, as the result of these operations, Medina was definitely cut off, for so much of the line had been ruined that the Turks were never able to repair it.

For the rest of the summer the Arabs continued their activities with uniform success. Both in the far south and round Maan raids and surprise attacks were carried out with boldness. It is impossible to describe such activities in detail, but some idea

of the value of these operations to Allenby may be gathered from the fact that the Arab forces succeeded in containing some 25,000 troops for the greater part of the year and in complicating the task of the Turkish authorities almost immeasurably. In the final and victorious drive northward their assistance behind the Turkish rear was beyond estimation.

The Hejaz revolt was eminently successful; and, granting the value of the Palestine operations, the British authorities, and in particular General Allenby, displayed great wisdom in fostering the Arab cause. Apart from the military assistance they gave to the British, it must be remembered that the 12,000 Arab regulars and the unnumbered irregulars who were active throughout the war would have been a priceless reinforcement to the Turks had the revolt never started.

General Allenby's task had been rapidly growing more difficult. The Indian reinforcements promised to him early in the year were indeed beginning to arrive, but their presence did not make up either in numbers or fighting quality for the loss his force sustained as the result of withdrawals. With the launching of the German offensive in the spring of 1918, terrible demands were made upon the man-power of the British empire. From March 21 to April 20, British casualties alone amounted to the ghastly figure of 225,000. To replace these was a task beyond the power of Britain herself; she was able to send no more than her regular complement of 23,000 men per month. The German pressure continued, and if disaster were to be averted, it was clear that other fronts must take their share of the strain. Accordingly the War Office was constrained to notify General Allenby that his instructions to launch an immediate offensive were temporarily cancelled, and that he must be prepared to part with large numbers of his best troops. As soon as possible they would be replaced by Indian divisions, but the demand in France for more troops was so insistent that the Palestine divisions had to be dispatched without delay.

As the result of this order, during the spring and early summer no fewer than 60,000 officers and men, all of them white troops, left Palestine for service in France. Their places, however, were taken by Indian troops, and Allenby's force was thus maintained at the level of four mounted and seven infantry divisions.

The Indian troops, however, had to be trained for their special duties, and they had to become acclimatized to their new

environment. In order to test their fighting quality, partly to keep up the spirits of the troops, and partly to consolidate and improve the British lines, a series of small raids was carried out during the course of the summer. It speedily became apparent that, although lacking in experience, the new Indian units were as spirited a fighting force as that which they had replaced. Final proof of this was offered in July, when the first large scale fighting since the second Transjordanian raid occurred.

On July 14 the Turks suddenly launched a strong attack on the scattered posts defending the west bank of the Jordan north of Ghoraniyeh. These posts were strung across a plateau known as Abu Tellul, and in the early hours of the morning three small German battalions, advancing with great courage, burst their way through the centre of the defences and pushed on southward. But the scattered posts held out gallantly, though completely surrounded, and the Turkish forces which should have been cooperating on either wing displayed considerable irresolution. The speedy advance of the 1st and 4th Australian Light Horse brigades caught the German troops against the advanced posts and took 377 of them prisoners. Owing to the complete failure of the Turkish troops the attack which had been so well begun by the Germans had been heavily repulsed with the loss of some of the best soldiers in the Turkish ranks.

This attack was really undertaken to screen operations in the south. The Turks were designing to drive in the British patrols guarding the ford at El Hinn and the bridge-head at Hijla, south of Ghoraniyeh. The positions were defended by the Imperial Service cavalry brigade, and on the advance of the Turks the Mysore Lancers and the Jodhpur Lancers, not waiting to be attacked, rode out and by a circling movement got on to the flanks of the enemy. Charging with magnificent dash, they utterly routed the advancing Turks and inflicted severe casualties as well as capturing many prisoners.

The result of the Turkish attacks on both fronts had been disastrous. Everywhere they had been beaten back. They had suffered severe casualties and lost 540 prisoners, besides several machine guns. The British casualties were under 200. But the fight had made clear two very significant facts. The Indian troops had proved their fighting qualities up to the hilt : the Turks had shown remarkable irresolution. This was the most bitter of all blows to Liman von Sanders. Writing of the

engagement, he said : "Nothing had occurred to show me so clearly the decline in the fighting capacities of the Turkish troops as the events of July 14."

It cannot be doubted that the morale which characterized the British force throughout the summer of 1918 was largely due to the concern which was taken for its comforts. The men were well fed, well housed, and enjoyed regular rests. But, above all, their health was protected with the most careful sanitary and medical service. Very different was the condition of things in the Turkish lines ; equally clearly the demoralization which was rapidly setting in was due to the terrible conditions under which the troops served. Filthy, verminous, clad very often in rags, and half-starved, their ranks were wasted by disease which they had not the means to combat. The wonder is not that they fought so well as they did, but that they fought at all.

August and the greater part of September passed quietly. Only sporadic skirmishes broke the quiet of the front. But enormous activity prevailed behind the British lines. The Indian troops were now thoroughly at home in their new conditions, and were displaying almost too great an eagerness to push forward. But Allenby moved with the utmost deliberation. His plan was no less than the complete destruction of the Turkish 7th and 8th armies. To that end he devoted all his energies. The situation in Palestine, which in mid-September had appeared to a watching world to have reached deadlock, was suddenly to be utterly transformed by a brilliant victory as unexpected and surprising in its execution as it was completely decisive in its results.

From the point of view of results, the campaign in the first half of 1918 was a distinct disappointment. The British lines were little advanced from the positions they occupied at the end of the previous year. Moreover, two large-scale operations into Transjordania had met with definite reverse. But this period of comparative inactivity was to produce fruitful results. The fact that the British position had remained relatively unchanged gave the engineers and the commissariat just the opportunity needed to perfect the long lines of supply. On their labours during the first part of 1918 was built the success of the British arms during the second part.

CHAPTER 19

Final Victories in Mesopotamia

After the death of General Maude in November, 1917, the troops in Mesopotamia, it will be remembered, passed under the command of Sir William Marshall who, carrying out the plan of his late chief, promptly set to work to drive the Turks still farther away from Bagdad. By December 5 he had forced them back as far as Kifri, about 150 miles north-north-east of the city, but the winter conditions prevented any further operations until the spring of 1918. It would have been useless for Marshall to press the attack, more especially in view of the fact that the half-demoralized Kifri force was no longer a menace to the north flank of Bagdad, while the westerly river-head at Ramadie on the Euphrates was again becoming a storm centre.

Throughout the early winter the successor to Ahmed Bey, who had taken up a position at Hit, about 95 miles west-north-west of Bagdad, had been receiving reinforcements and huge quantities of artillery and rifle ammunition. Neither the newly arriving infantry nor the new gunners were in number proportionate to the munitions stacked in their widespread encampments. The fresh troops appear to have been only the advance guard of the long-delayed host of desert campaigners. At any rate, they were insufficient to guard the vast accumulation of military stores from the characteristic leaping attack of the Indo-British Euphrates columns.

The new Turkish commander endeavoured to avoid the fate of his predecessor by splitting up his forces; he kept his main strength 15 miles upstream from Hit; so, when British patrols approached this village on the morning of March 9, 1918, they entered it without opposition. Both the rearguard and main body of the Turkish army of the Euphrates were retreating at high speed to Khan Bagdadie, along a road climbing the barren hills like a staircase cut out of rock. So bad was the road that, at the end of the 22-mile march the enemy commander rashly imagined he could stay awhile at Bagdadie village. His troops

had been severely shaken by a strong aeroplane pursuit. The British airmen bombed and machine-gunned the long hostile column, inflicting heavy casualties on the dense ranks and filling many troops with panic.

Probably it was necessary for the enemy commander to make a stand in order to revive the spirit of his men as well as to defend the great preparations for the proposed Turco-German campaign. The British general seemed rather slow in continuing his operations, in spite of the fact that Sir William Marshall's orders were that the enemy should be driven as hard and as far as possible. The apparent delay, however, veiled a fortnight of intense and far-reaching preparation in attack and pursuit.

When, on March 26, 1918, the British and Indian infantry moved forward in waves of assault, under cover of machine guns and artillery, victory had been organized. As at Ramadie, the Indo-British cavalry was used as an enveloping wing. The troopers made a long, arduous detour through the desert, and, arriving right across the path of the retreating Turks, entrenched again on the caravan road to Aleppo.

It may seem extraordinary that the new Turkish army of the Euphrates should have allowed itself to be trapped and destroyed by practically the same simple manœuvre General Brooking used against the former Turkish army on the same river. The explanation was that, though the manœuvre was simple in theory, it was so immensely difficult in practice on this occasion as to seem quite impossible to the Turkish general. The journey through the wilderness was a bitter ordeal, yet not only did the cavalrymen bring their horses through it, right round the enemy's lines to the water's edge upstream, but a strong squadron of armoured motor-cars succeeded in getting over the stony waste on to the Turkish rear.

The course of the action proceeded on the lines of the Ramadie encirclement. The stubborn Indo-British infantry assailed the enemy's left front, and by the evening took the village. Thereupon, in the darkness, the Turkish commander frenziedly concentrated his right, and at midnight tried to break through the cavalry-held line by the Aleppo road. Losing more than 1,000 prisoners, as well as many men put out of action, the remnants of the Ottoman force trailed upstream for 22 miles to Haditha, where a ruined bridge partly connected with both banks a castled island in the stream.

Fierce and close behind the fugitives came the pursuers Haditha fell on March 27, and the Turks continued their flight along the river-line. For a distance of 130 miles the pursuit continued at a marvellous pace, and only when no formed bodies of the enemy were to be seen from aeroplanes within striking distance of the armoured cars that reached a point 73 miles above Ana, were the remarkable operations of the flying column stopped. The cars brought the armies of Mesopotamia and Egypt within 300 miles of each other and, approaching the great desert road running from the Euphrates by Palmyra to Damascus, opened for a transient glimpse a vista of possibilities of linked, sweeping action. The Turkish prisoners taken in the Khan Bagdadie operations numbered 5,232 officers and men, including the commander and staff of the 50th division. Fourteen guns, 50 machine guns, thousands of rifles, with all the superabundant ammunition forwarded for the intended march on Bagdad, fell into the hands of the victors.

As this great material and moral success was brought to a close early in April, 1918, immediate preparations were made by Sir William Marshall for another stroke of similar weight against the distant, separated Turkish right wing, extended near the Persian frontier. Between the towns of Kifri and Kirkuk, behind the half-won range of Jebel Hamrin, the enemy's forces were scattered in a loose and feeble manner.

The new operations began towards the end of April, 1918, at a time when the crops were ripening in one of the most fruitful regions of supply in Mesopotamia. Yet again the Indo-British cavalry completely took the enemy by surprise by the unparalleled sweep of its enveloping ride. The Turks at Kifri expected the attacking horse to cross the Jebel Hamrin pass in their rear, and they therefore hastily evacuated the town in the morning of April 27, 1918. But the cavalry were making a far wider movement designed to close upon the retreating force at Tuz Khurmatli, on the road to Kirkuk, and when the Turks were still in Kifri, the Indo-British horse, with no support within 20 miles, arrived within six miles of the trapping place. A Turkish detachment, guarding communications, endeavoured to escape, but was caught in a crescent of charging sabres, above which aerial machine gunners operated, and very few escaped to the hills, after 150 had been killed and more than 500 captured. In the meantime four other columns of attack pressed the main

enemy's force and shepherded it out of Kifri, Ain Faris and Chaman Keupri towards the appointed place of doom.

On April 29 the net was closed round the 2nd Turkish division entrenched along the stream by Tuz Khurmatli. Lancashire troops, working against short-range artillery fire, broke into the enemy's right flank and compelled him to abandon Tuz. With very slight loss on the British side, the battle was won in three hours, leaving only fugitive remnants of Turks to be overtaken on the Kirkuk road. The pursuit was again conducted at extraordinary speed over a distance of 100 miles, Kirkuk and Altun Keupri being taken, and the lesser Zab river crossed. Along the Tigris, Tekrit was again captured, and the river advance was continued for another 45 miles to Fatha, near the junction of the lesser Zab and the main river. Then Sir William Marshall drew his chasing force slowly backward, leaving Altun Keupri and Kirkuk to the enemy, and concentrating about the Tuz region, where he had taken 3,000 prisoners, 16 guns, 28 machine guns, and large military stores.

About this time the forces under Sir William Marshall were seriously diminished by reason of Sir Douglas Haig's urgent need for reinforcements in France and Flanders. In order to release British troops in Palestine and India, the 7th division was sent to join Sir Edmund Allenby's command, and was followed in May, 1918, by the 3rd division and three siege batteries. A fresh Indian division was formed out of companies of veteran troops in Mesopotamia, filled out with a small proportion of recruits, and dispatched with a brigade formed in the same way, further to relieve white troops in Palestine and India. The result was that Marshall was left with a considerably reduced army.

By this time Mesopotamia had been almost entirely won, and little more than strong military police work was required to guard it. During the spring and summer of 1918, therefore, the force was mainly engaged in the settlement and development of the country, which, under British administration, was beginning to recover some measure of its Biblical prosperity.

By the summer of 1918 General von Ludendorff had accepted defeat in Mesopotamia, and was prosecuting a new and larger scheme in the direction of Bokhara. With direct help from the Soviet rulers of the larger part of Russia, a Bolshevist force, backed by armoured trains and Austrian, Hungarian and German prisoners of war, began operations round Merv, by the

northern frontiers of Persia and Afghanistan. On the other side of the Caspian Sea a strong Turkish force swept into the Tartar territories of Caucasia, while some six German battalions crossed the Black Sea and entered Georgia, and, after supporting the claims of the Georgians, endeavoured to seize Baku, the bridge-head of the Caspian and centre of the petroleum industry. The design was for the Germans and Turks to act together in seizing the railways which the Russians had built in the old days for the invasion of India, raise all the Mahomedans of Turkestan, Persia and Afghanistan, and, with the liberated Austrian and German prisoners of war in Siberia, and Bolshevists, press down towards the Khyber pass. The direction of this new attack was well chosen. The Russian railways connecting with Baku and with Orenberg, and linking Samarkand, Bokhara and Merv, gave much nearer bases of attack than Bagdad, and by a direct menace to British power in India allowed the army of Mesopotamia to be neglected.

Sir William Marshall, however, had not been idle while the enemy was preparing this new movement. At the end of 1917 volunteers from the army in Mesopotamia were called for, and some officers and non-commissioned officers, with a small number of recruits, were mysteriously collected in a camp near Bagdad. There they forsook the study of Arabic and displayed an interest in the Persian language, the Armenian tongue, and other strange ways of speech. To add to the mystery they took to dressing themselves up like Arctic explorers. About the middle of January, 1918, Major General L. C. Dunsterville, widely known as "Stalky," arrived in Bagdad to lead the "hush-hush" push.

On January 27 General Dunsterville set out. He had with him a party less than a battalion strong, and a transport of 750 motor-vans. He took the old road of adventure from Bagdad through Kirmanshah to the Caspian Sea, which had been trodden by the armies of Cyrus and Darius and the later Mongol invaders. It was a marvel that any large armed forces could use such a road. It was unmetalled and worn down in a soil of black dust, famous for its fertility, but dreadful to march or drive through after rain. In the highlands, where the passes rose more than 7,000 feet, the sharp rock surface added a difficulty to modern transport problems by cutting up the tires of the motor-vans with great rapidity. There were many swift-running streams which had to be bridged, the enemy having blown up the old

bridges. Then, far from being able to live in the fertile plains, during his journey of 700 miles to the Caspian Sea, General Dunsterville had to rescue the dying population of north-western Persia. Through the unhappy land five armies had passed in 18 months, both Turk and Cossack living on the country, and leaving desolation behind them. Crowning all the misery came a great drought. The Persians were as hostile as their strength permitted, their natural aversion to allowing another army to pass over their land being fostered by Ottoman and German missionaries of disorder.

But the Briton did not take; he gave. He found dead and dying stretched by the roadside, and paused to succour them before continuing his dash towards the Caspian to join in the Turkish and Teutonic race for Baku. Relief works were opened at Karind, Hamadan, Kirmanshah, and other places, and with the help of Mr. and Mrs. Stead, American missionaries, tens of thousands were saved from death by hunger.

In the meantime British engineers blasted and levelled easier gradients on the series of mountain passes between Bagdad and Kirmanshah, and the systematic metalling of the road was begun. Even then it took the entire convoy of 750 motor-vans, plying daily in stages from the frontier, to feed less than 1,000 men at Hamadan.

In spite of all difficulties General Dunsterville arrived at Kasvin, west of Teheran, on June 1, 1918, and joined the volunteer Russian force, 1,200 strong, under General Bicherakhoff. With a small British detachment, the Russian volunteers set out for Enzeli, on the southern shore of the Caspian, but were held up by a tribe, the Jangalis, who were led by German officers. Assisted by the light armoured cars of the British force the Russians attacked, won the bridge, and reached Enzeli.

The Jangalis lived in dense forests by the town of Resht, and, by reason of their cover, were able to raid the new line of communications of the Mesopotamian force outstretched 700 miles from its base. The chiefs had lost a considerable amount of prestige in their defeat by the bridge, and the tribesmen no longer believed all that the Germans told them. For some weeks they continued casually to snipe at the British convoy, but on July 20 they descended on Resht, which was held by a small detachment of Hampshires and Gurkhas. The garrison was not large enough to man a line round the town, and the enemy drove in and

assailed the British consulate and bank, only to be swept out in fierce hand-to-hand fighting by the little British and Indian force, which killed more than 100 of the tribesmen. This finally convinced the Jangalis that the tales told them by Turk and Teuton were fictions. They agreed to break with the Ottoman, and gave no more trouble to General Dunsterville's small force. Eastward, the Caspian road was menaced by another tribe in German pay, the Kuhgalus. These began operations by raids against the Bakhtiari Khans, a friendly race of hillmen, who, through the war, guarded the British oil-fields near Ahwaz, on which the British navy largely depended for fuel. Small detachments of Indian troops were sent eastward to secure the Ahwaz-Ispahan road and generally protect communications. One section of an Indian mountain battery marched 395 miles in 28 days in the hottest part of the year, and, after reducing the tribesmen to order, returned to its base all in excellent condition.

With the road secure on either side, General Dunsterville completed his journey of 700 miles and arrived at Enzeli. General Bicherakhoff had then sailed away and accepted the post of commander of the Red army of the Caucasus. At this time the Bolshevists held almost complete sway round the Caspian, and were naturally strongly opposed to British intervention and subtly favourable to Germanic interests. General Dunsterville arrived at Enzeli, with a small party of officers and no escort except the drivers of the motor-vans in which he and his staff had come from Hamadan. The Bolshevist tribunal summoned the British general to attend before them, but he managed to induce the Soviet to call on him. He explained he was going to Tiflis in order to report to his government on the situation in the Caucasus. The Bolshevists replied that they had a gunboat on the Caspian and would sink any ship in which he tried to sail. Moreover, they openly and frequently proclaimed the fact that the Germans and Turks were their friends, against whom they would allow nothing to be done. Dunsterville's party did not number a score, but he managed the situation so admirably that the new allies of the Turk and Teuton not only allowed him and his party to depart but provided him with petrol for the journey back to Hamadan.

In the meantime General Bicherakhoff found that the Russian forces at Baku, forming part of his new command, were treacherous, and, being convinced that the fall of the town was

inevitable, retired with his 1,200 volunteers northward. General Dunsterville returned to Enzeli with parts of three battalions of Worcesters, Warwicks and North Staffords of the 39th brigade, having 1,000 miles of communication between his port on the Caspian and his base at Basra on the Tigris. The Bolshevist forces had melted away, and an English officer with one platoon sailed across the sea to Baku to report on the situation there.

While waiting for news the British commander got in touch with a multitude of Assyrians, Nestorians and other refugees, who had been holding out in the mountains by Urmia lake against the exterminating Ottomans. By the middle of July the heroic resistance of the outcasts was weakening, more through lack of food and an epidemic of cholera than from any failure in courage. British aeroplanes traced the fighting refugees, and a plan was made to send them a convoy with ammunition, machine guns and money. The convoy arrived at the appointed spot on July 23, but the Assyrians were 10 days late, and by the time they came the Turks had carried Urmia, and were driving out the collection of little independent races which had come together for defence down the road to Sain Kala. There, however, the small British and Indian escort of the convoy checked a massacre, rescuing some 50,000 men, women and children, representing, in the Assyrians and the Nestorians, the oldest people in the country.

General Dunsterville then decided to go with his men over the Caspian Sea to Baku. The lieutenant who had first explored the situation in the city with a platoon reported that the handful of British troops had had an electrifying effect upon the Armenians and Russians holding the town against a great Turkish force. The day after the first British arrived, the townspeople met the Turks and broke an assault in gallant fashion.

This was the reason why General Dunsterville sailed for Baku, with his detachment of Worcesters, Warwicks and North Staffordshires. The number of men he was able to transport was restricted by the increasing length of his communications, but he managed to ferry a force of armoured cars over the great inland sea, together with some artillery and a small detachment of infantry. It was sufficient for the purpose of stiffening the 7,500 Armenians and 3,000 Russians garrisoning the town, and the British commander would have achieved one of the most romantic exploits in the war had the fighting townsmen, who

had implored British aid, continued as they had begun. But the Armenian volunteers especially could not rise to the occasion. Both they and the Russians seemed to think it was no longer necessary for them to bear the burden of battle when the British had arrived, so they gave General Dunsterville's little force scarcely any assistance.

On August 26 the Turks, who had command of the railway and were obtaining a constant stream of reinforcements, made a determined attack on an English company, whose large reserve of local Baku troops refused to help in the action. Against the odds of five to one the Englishmen met a massed Turkish bayonet charge, and only drew in from the salient in the line after suffering heavily and inflicting severe losses on the Turks. With large fresh forces the enemy again tried to carry the city by storm on August 31. The first attack was beaten off, but in the second action some Armenian battalions broke and fled, exposing the British and Russian flank. Again the defending line was drawn in, and when on the following day the Turks again attacked, only the English troops met them. Consequently more ground was lost, but the Turks, on the other hand, were swept down in such masses by the guns, foot, and armoured cars that they made no further movement for a fortnight.

At this time General Bicherakhoff was 200 miles north of Baku. The British commander sent a message to him urging that if his force would only return to the city the combined detachments of some 2,000 regular British and Russian soldiers could save Baku. The Russian officer agreed with this plan, and the first small detachment of his men arrived on September 9. On September 14 the Turks, reckoning they had won the town by treachery within as well as with force without, closed down on it in great strength of both men and artillery. The Armenians, who had been concerned in the treacherous negotiations, were given a strong line of hills to defend, which they abandoned in a manner that can only be termed shameful. The little British force had to save its flank by extending to the last ridge on the outskirts of the town. From this ridge the harbour could completely be dominated, and three weak English companies held it through the day and prevented grave disaster.

In the centre the enemy was fought to a standstill by rifle fire, but a counter-attack failed. Well-handled Turkish guns so curtained off the ground that the British and Russians lost all

their officers as well as many men, while the Armenians only saved themselves by drawing out of the attack at an early stage as soon as they came under shell fire. On the North Staffordshire Regiment and men from the Royal Warwick and Worcester Regiments fell all the burden of the struggle. They could not have fought the enemy to a standstill except for the aid given to them by the crews of the British armoured cars, who in boldly and skilfully executed movements put out of action great numbers of the attackers.

By four o'clock in the afternoon of September 14 the large Turkish forces round Baku, having fought since dawn without gaining their objectives, were exhausted. They could do little more than occupy the intermediate positions, which they had won through the cowardice and treachery of the Armenians. Had it been possible to counter-attack them they would have broken and fled. But General Dunsterville had no men left for a counter-offensive. Every British rifle was in the line, and neither the Russians nor Armenians, still numbering 9,000, could be induced to attack.

With the enemy occupying high ground from which he could shell the shipping in the port at ranges of 3,000 and 5,000 yards, nothing remained but for General Dunsterville to inform the Baku government of his decision to evacuate the town. By eight o'clock in the evening all sick and wounded were carried into ships. Two hours afterwards the rest of the troops were in the three vessels allowed for their use, and a fourth ship was laden with ammunition and explosive. This was hit by gun fire from the Russian guardship at the harbour mouth, but the other vessels, moving without lights, escaped untouched, and all four safely reached Enzeli. For six weeks the British detachment had denied to the enemy the bridge-head of the Caspian Sea and oil-fields of grand importance, besides inflicting severe losses on the Turks and compelling them to bring up an overwhelming force before Baku could be captured. The Dunsterville expedition was a brilliant episode, representing a tactical failure and a strategic success. But for the demoralization of the Armenians and some of the Russians it would have been a complete success, saving the lives of thousands of refugees.

Baku was reoccupied by the 39th British infantry brigade, with Russian and Armenian troops under General Bicherakhoff, on November 7, 1918, after the surrender of the Turks. By this

time 340 miles of metalled road had been constructed from the Mesopotamian base to Hamadan, in Persia, allowing light motors to travel 48 hours after a rainfall. The better road from Hamadan to Enzeli was repaired, and on this improved line of communications operations continued against the Bolshevists.

It was not until October that the main body of the Mesopotamian Expeditionary Force came into action again in a final battle on the Tigris by the ruins of Asshur, the oldest city of the Assyrians, whose mouldering temple and walls stand by the modern site of Kalaat Shergat. The Turkish 6th army covered the approaches to Mosul by holding a position of great natural strength astride the Fatha gorge, where the rocky heights of the long Jebel Hamrin crossed the river and ran into the desert. Here Ismail Hakki, the ablest of Ottoman commanders, had spent 18 months in making entrenchments, prolonging his right flank through the waterless desert to Shergat, and placing batteries on the ranges of hills to sweep the road through the sand.

On the left flank his men were entrenched for five miles on the crests, and by the junction of the lesser Zab stream and the Tigris there was another series of works. The Ottoman commander had about 9,000 rifles and 59 guns placed around the gorge, and he was busy saving Sir William Marshall all further anxiety regarding the other part of the Bagdad-Caspian road by drawing a division—the 5th—from the Urmia region back towards Mosul. Other Turkish forces were also being hurriedly withdrawn in the first week of October from the Caucasus in a vain endeavour to prevent Allenby's victory in Palestine from developing into complete disaster for the Ottoman empire.

Immediately Sir William Marshall received news of the grand successes of Sir Edmund Allenby he made all preparations, and on October 7 he received a definite order to take the offensive. Much of his transport was scattered in Persia and in harvest work between the two great rivers. This prevented him from striking through Kirkuk, far north of the Hamrin range, and making the Turks fight on ground of his own choosing. The British commander had already reached Kirkuk in the victorious advance, but had drawn back through lack of transport, which had been needed in Persia. In these circumstances nothing remained but a direct attack up the Tigris against the great fortress of the mountain range. A frontal attack was impossible in the nature of things. Even if successful it would have given

no rapid road of advance along the river and would have been very costly. The manœuvre adopted was to turn the left of the Turkish stronghold and force a passage over the lesser Zab, bringing the enemy's right positions under flanking fire and enabling them to be attacked with better chance of success. Then it was intended to cut his line of retreat by means of cavalry working round on the left, while light armoured motor-cars moved round on the right. There was, however, no room for any element of surprise in this scheme. The Turks and their Teutonic advisers had carefully foreseen every possible movement, and Ismail Hakki was well prepared on both sides of the gorge. The conduct of the main operations of assault was given to Lieutenant General Sir A. S. Cobbe, commanding the 17th and 18th divisions and 7th and 11th cavalry brigades. Protecting his right flank was a small column under Brigadier General A. C. Lewin, whose task was to fend off Turkish forces on the higher reaches of the little Zab stream.

General Cobbe began by making repeated bold raids against the enemy's right flank in the hope of inducing a wasted concentration there. Then, on October 23, he got in touch with the Turks on both banks of the Tigris, and moved a column along the crest of the Jebel Hamrin against the Turkish left, while the 7th cavalry brigade carried out a wider enveloping movement in the same direction north of the barren hills. This manœuvre had the desired effect, and the Turks abandoned their great stronghold in the gorge during the night, blowing up the riverside road they had made.

British engineers at once began blasting a new path between the water and the rock. Meanwhile, another cavalry force, the 11th brigade, had been making a 45-mile march through the northern desert, and about three o'clock in the afternoon of October 24 they reached a point on the lesser Zab some 20 miles above the main battlefield. The horsemen found a ford covered by Turkish fire, but crossed through the deep water with remarkably slight loss, formed a bridge-head, ferried their transport over the stream, and sent a strong detachment riding down the tributary and clearing the bank of Turks.

Above them Brigadier General Lewin's column carried Kirkuk, and below them the 7th cavalry brigade and the 53rd brigade of infantry battled across the stream near the confluence with the Tigris, meeting with strong opposition, yet conquering and

extending the bridge-heads. Under this pressure the Turkish forces on the left bank of the great river retreated across a bridge they had prepared at El Humr.

Then came the main tussle for the El Humr position. It was hard, wearing fighting for the untried 17th division of young Indian troops and the British battalions. Through the deep ravines and up the steep sides of the Makhul mountain and the Khanuka mountain, on which the second Turkish position was based, the forces of the assault slowly worked, their transport following them up goat-tracks and breaking bulk from wheel to pack. Extreme was the difficulty of getting both light and heavy guns forward to support the clambering infantry, whose endurance was tested terribly by heat and thirst as well as by the enemy's stubborn resistance. The early successes on the left bank of the river told on the course of the struggle. Here the British artillery was able to enfilade the hostile stronghold. Steadily the 17th division worked upward and onward, and late in the evening the leading battalion of the 1st Highland Light Infantry made an heroic rush at the Turkish works covering the El Humr bridge. The wire entanglements protecting the entrenchments were uncut, but the Scotsmen themselves broke through the wire, stormed the trenches, and then held them throughout the night and the following morning, repulsing every counter-attack, in spite of their own bodily weakness and thinned ranks.

The grand thrust they had delivered was continued on October 26 by the 17th division. With the same slow, grinding effect, battalion after battalion came into action all through the day and night. At dawn on October 27, while the Turks were intent upon the defence of their mountain fortress, the 11th cavalry brigade of 7th Hussars, Guides Cavalry, 23rd Cavalry, and W Battery Royal Horse Artillery, under Brigadier General Cassels, made a wide detour by the Tigris and found a ford some 14 miles up the river. Through a strong current, some five feet deep, the leading regiment crossed and took at a gallop the Huwaish gorge in the Turkish rear, blocking the road of retreat to Mosul. The British armoured cars on the other side cut the telegraph line to Mosul, while another cavalry brigade distracted the enemy by a feint towards Shergat.

The horsemen behind the trapped Turks began operations by bursting upon the enemy reserves south of Huwaish, and scattering them with the help of some light armoured cars. This not

only assisted the British and Indian infantry still fighting over the mountains but concealed in an uncommonly effective manner the weak strength of the Hussars and Guides and their comrades. The main Turkish force began to give under this surprise stroke at its rear, and while the enemy was still too confused to mass upon the single, tired cavalry brigade that barred the road, the 53rd infantry arrived, with some guns, and, after a march of 33 miles, moved into position at Huwaish.

Likewise, with a view to preventing the enemy from turning and throwing all his weight upon the 11th cavalry brigade, the infantrymen of the 17th division continued their advance through difficult ground, maintaining such a menace of breaking through the Turks that the main hostile force had to act in shifts as rearguard. At three o'clock in the morning of October 28 the 17th division was still moving over a broken, arid waste, and at the end of eight hours it closed once more with the Turks holding a rearguard position three miles south of Shergat. The 2nd West Kents broke clean through in a most skilful attack, taking some 200 prisoners and 11 machine guns. By two o'clock in the afternoon the Ottoman was retiring from the field of battle. The men of the 17th division, under Major G. A. J. Leslie, could not continue the pursuit of the demoralized Turks. They had been fighting since October 23. Men and animals were completely exhausted through great physical exertions, desert heat, and lack of water. They had to get to the river and drink.

The 11th cavalry brigade, reinforced later by the advanced battalion of the infantry brigade, rode for 17 hours from Fatha, and lost men and horses by drowning at the ford, in a determined effort to complete the enveloping movement. They took over the position on the right flank, where a fresh Ottoman force, the 5th division from Urmia, speeded through Mosul, was trying to break into the British rear and so release the main body of the Turkish 6th army. On this side of the river Brigadier General Cassels, who had executed the decisive manœuvre with the 11th cavalry brigade, was given charge of all the operations that closed the gate of escape to Mosul.

During the night of October 28 the Turks continued to attempt to break out, but were thrown back. In the darkness, over dreadful tracks, the 17th division fought forward, and by 11 o'clock in the morning of October 29 drove the enemy rearguard on to the main body, which in turn they attacked through lines

of entrenchments and ravines by Shergat. Against a heavy fire Britons and Indians charged in the afternoon, falling back in places under fierce counter-charges, in which the 114th Mahrattas distinguished themselves by shattering the sallying enemy. Throughout the night the terrible contest in pluck and endurance proceeded.

The Turks were heartened by the arrival of their 5th division in force with artillery. The new troops occupied the high bluffs by the ford, but were dealt with by the 13th Hussars of the 7th brigade. Led by their colonel, these galloped across the open, under artillery and machine gun fire, dismounted by the bluffs, and carried the position with the bayonet. The remainder of the cavalry brigade rode in pursuit of other Turks, and ended the menace from the north with the capture of 1,000 prisoners.

Ismail Hakki's position was then hopeless. His men were packed in hollows that were raked by British gun fire, and, as at dawn on October 30 the attackers closed in for the final attack, white flags appeared all along the enemy lines, and Ismail Hakki surrendered later in person. Marshall then led his troops to Mosul. When he entered it, on November 3, he was offered no opposition, for Turkey had by that time surrendered to the Allies.

Thus ended the campaign of four years that had begun in a small way by the capture of Fort Fao on November 7, 1914, when the scheme was only to safeguard the Persian oil-field and protect friendly tribes round the Persian Gulf. The Briton, as was his way, had gone farther than he intended, and only by serious reverses had been spurred to put out his full strength. Some 114,000 square miles of territory had been conquered, 45,000 prisoners and 250 guns being taken, in one of the worst fields of operations in the world, where Alexander the Great had perished and the extension of the power of Rome had been checked when Julian fell with his army at Ctesiphon.

CHAPTER 20

Last Fighting in the Balkans

By the end of 1917 Rumania's participation in the war had come to an end. Her army in Moldavia was cut off from the Allies by the German armies, and Russia was fast collapsing. In these circumstances the Central Powers came to the conclusion that victory on this front could be secured without further fighting. In February, 1918, Germany intimated to the Rumanian headquarters that peace was about to be concluded with Russia, and suggested that as the armistice with Rumania was ended she should enter into negotiations. In the plight she was in, Rumania had no alternative but to agree. King Ferdinand asked General Averescu to form a ministry which would conclude a peace, and he undertook that melancholy duty.

At Bufta on March 5, 1918, a preliminary declaration was agreed to, which was the basis of the treaty of Bukarest, signed on May 7, 1918. By it Rumania was to remain in the occupation of the enemy armies, which she had to maintain until the conclusion of a general peace; she ceded the Dobruja partly to Bulgaria and partly to the Central Powers; she was also to indemnify Germany and transfer to her the Rumanian oilfields. This treaty was, of course, annulled after the general peace.

While Rumania was passing out of the war the Allies at Salonica were steadily preparing for the great offensive which was to open on all fronts in 1918. During the early part of the year the Greek army, which now numbered 150,000 men, had been completely reorganized; and in some lively fighting near Huma, west of the Vardar, at the end of May and the beginning of June, during which the Allies took 2,000 prisoners and several lines of trenches, the Greeks bore the brunt of the fighting and acquitted themselves well. In June General Franchet d'Esperey took command of the Allied armies at Salonica, but for three months after the success at Huma there was comparative quiet along the whole front except in the mountainous district north of Valona (Avlona) where there was sharp fighting between the Italians and the Austrians, the former, helped by

the French, gaining a few miles of ground and pushing their outposts towards the Semeni. In July the Italians began a regular offensive which, at the start and for some little time afterwards, met with much greater success than they had anticipated and prepared for, and this explained their loss later of some of the territory they had occupied in their advance.

On a front of about 70 miles the Italians—with French forces on their right, and supported from the sea on their left by British monitors, with British and other Allied aircraft along the whole line—attacked the Austrian positions near the Voyusa, the assault being particularly intense in the region of the mouth of the river, some 15 miles north of Valona, on July 6. After a bitter struggle the Italian infantry carried the heights between Levani and the monastery of Poyani. The Italian cavalry, by a quick movement, got between the western slopes of the Malakastra range and the sea, daringly attacked the enemy in the rear, and destroyed the bridges on the Semeni at Metali.

Pressing on, they possessed themselves of Fieri on July 7. In the centre, entrenchments south of Berat were taken by storm, and a determined effort on the right gave the Italians a series of heights situated near the headwaters of the Tomoritse. Farther east, between that river and the Devoli, the French drove the Austrians from several fortified peaks. Except in the plain beside the sea, the terrain, a jumble of mountains and narrow valleys, was exceptionally difficult, yet on July 8 and 9 the advance proceeded with a rapidity that was amazing in the circumstances. The Austrians, losing heavily in prisoners, guns, and material, fell back behind the Semeni under cover of rear-guard actions. On July 10 the Italians entered Berat, where they were hailed by its people as the liberators of Albania, and had everywhere reached the Semeni. North-east of Berat the French pushed up the right bank of the Devoli, and captured the village of Mecan.

This Allied offensive had the general result of straightening the Franco-Italian front all the way from Lake Ochrida to the mouth of the Semeni. In the fourth week of July the Austrians began a counter-attack in some force, and compelled the Italians to withdraw their advanced posts, their front afterwards running about four miles north of Berat. Higher up the coast Allied aeroplanes repeatedly bombed Durazzo, and did the enemy much damage; British machines took a considerable part

in these operations. For two or three weeks the new front on the Semeni was in a condition of "unstable equilibrium," and then, on August 22, the Austrians, now commanded by General von Pflanzer-Baltin, developed an offensive with forces and guns that much outnumbered those of the Italians, who had to retire from Fieri and Berat, and withdraw to their prepared positions north of the Malagastra range. The net gain from the July operations was an improved defensive line for the Italians well to the north of Valona, and better tactical positions for the French on the east. The Italians took nearly 3,000 prisoners, and the French more than 1,000, while 30 guns were captured.

The retirement of the Italians after August 22 was executed with great ability, and their losses were very slight, while those of the Austrians were probably much heavier. On September 1 the British carried out a very successful local operation west of the Vardar and immediately south of Gevgeli, capturing five hill tops which formed an advanced Bulgarian salient that was strongly fortified. Next day the Bulgars made a desperate effort to recover the lost ground, but were repulsed. During the first and second weeks of the month there were various raids and encounters, with much artillery fire, but nothing to indicate the extraordinarily sudden and dramatic change this whole front was to undergo before the month closed.

After a day's artillery preparation, the Allied offensive—the complete success of which within a fortnight was the first indubitable indication that the end of the Great War was approaching—opened at eight o'clock in the morning of September 15 with a powerful infantry assault. The section of the front chosen for attack was the most difficult in Macedonia—a mountainous region, with peaks towering to a height of upwards of 5,000 feet, lying almost midway, in a tremendous mass about 10 miles in length, between Monastir on the west and the Vardar on the east. From west to east the chief mountains were Sokol, Dobropolye, Kravitsa, Vetrenik, Kukuruz, Golobilo and Kozyak, and some of these were already famous in the war as the scene of heroic fighting, in which Serb and Bulgar had been almost exclusively engaged. The bitter struggle, which had behind it an intensity of racial feeling perhaps unparalleled in the world, was now renewed, the French aiding the one race and the Germans the other.

Commanded by the Viovodes (marshals) Boyovitch and Stepanovitch respectively, the Serbian 1st and 2nd armies held this part of the Macedonian front of the Allies. The total strength of the two Serbian armies was about 90,000 men, and of these 22,000 were Yugo-Slavs. In close combination with the Serbs were two French divisions. Such was the force to which Franchet d'Esperey had entrusted the hard but glorious task of breaking the front of the Bulgars and of driving them from their strong positions in these rugged and lofty Macedonian mountains.

The rest of the Allied front was held as follows. On the right of the Franco-Serbian force, from about the Skra di Legen eastward to the Vardar, and across that river to Lake Butkova and the Struma, stood the British Salonica army and several divisions of the Greek army, a Greek division being on the immediate right. On the Franco-Serbian left were French, Greek and Italian divisions reaching west to Monastir and the Baba mountains beyond to Lake Prespa—the Russian contingents that had once been on this line had disappeared, just as they had disappeared from the western front. West of these composite forces, all the way to the Adriatic, were French and Italian divisions, with Albanian detachments about Korcha (Koritsa).

The whole Allied strength was approximately 400,000 men, with powerful artillery and commensurate munitionment. Over against the Allies in Macedonia lay the Bulgarian 1st army, on the west side of the Vardar, and the Bulgarian 2nd army, on the east side of the river, the whole consisting of 16 divisions—each Bulgarian division, if at full strength, being more than twice the size of the usual division on the western front. The Bulgarians were reinforced by detachments from the German 11th army, which was quartered in Serbia. In Albania a considerable Austrian army was arrayed against the Italians and the French. The total strength of the enemy was probably at least equal to that of the Allies.

For three days the battle was extremely violent. Stepanovitch began by driving against the heights of Sokol, Dobropolye and Vetrenik, which formed the south-west rampart of the front attacked. On two former occasions the Serbs had stormed their way some distance forward, but only to be beaten back. Under German teaching the Bulgars for more than two years had brought every imaginable device to bear to strengthen and fortify their line. So steep was the ascent to it that they were able to

drop bombs from the parapets straight on to the heads of the Serbians below. Some distance behind this formidable sector the enemy had constructed a railway from Prilep to Gradsko, on the Vardar, with roads leading up to the front. That railway line now became the Allies' objective. So irresistible was the onslaught of the Serbians, in union with the French, that before the evening of September 15, Sokol, Dobropolye, and Vetrenik, which the Bulgars had deemed impregnable, were carried.

It was a hot, clear day, and as the assault progressed French and Serbian aircraft effectively supported the advance of the infantry, and bombed the enemy's communications. Notwithstanding the difficulties of the ground, the whole of the first Bulgarian position was broken for a length of seven miles. Next day a Sofia official dispatch admitted the defeat, and added that in order to avoid the sacrifice of the Bulgarian troops they had been "withdrawn to new positions situated farther north," after an "obstinate struggle in which the Allies suffered heavy losses." As a matter of fact, the losses of the Allies were much below what had been anticipated.

At the same time heavy fighting had been going on farther north and east from above Gradeshnitsa to Bahovo. On September 16 the Serbians carried the fortified zone between Sokol and the Gradeshnitsa, and, forcing the crossing of that stream, threw back in disorder the Bulgars, who were caught by machine gun fire from the Allies' aeroplanes as they were retreating across the bridge at Rasimbey. East of the Vetrenik height, Allied forces took by storm the massifs of Chelm and Golobilo, and the Yugo-Slavs took the Kozyak peak, the second Bulgarian line of defence, and the highest point in the whole range. The Bulgars put up a strong defence, and they had German supports, but they were swept out of their trenches. On that day, too, the breach made in the Sokol-Dobropolye-Vetrenik district, both on the west and the east, was widened in length to 10 miles and in depth to about five miles, while the number of prisoners materially increased. Of these operations General Franchet d'Esperey reported:

> Serbian troops, fighting with splendid morale, rivalled in endurance, courage, and the spirit of sacrifice the French units in repulsing the Bulgarian counter-attacks, which were carried out with the utmost vigour, and in carrying by sheer fighting, in spite of the stiffest resistance, positions which the enemy had been fortifying for three years on ground at an average

height of 5,500 feet, comprising a series of wooded and steep heights, some of which had appeared to be impossible to scale.

In hot haste the Bulgarians rushed up reinforcements, but despite this the Allied offensive continued with success on September 17, all the objectives fixed for the day being reached. Another factor now made itself felt on the side of the Serbs and the French. A dispatch from Athens, dated September 16, had noted that Greek troops had effected an advance of from two to three miles on a front of 19 miles, and had occupied several villages, dislodging the enemy by a bold movement which had taken him completely by surprise, and had caused him severe losses. Later the Greeks, whose forces were brigaded with those of the other Allies in various sectors, and did not operate independently, captured the heights of Zena and Porta. Greek detachments cooperated with the Serbs and French in taking, after a severe struggle, the fortified villages of Zovik, on the Cherna, and Stravina, as well as the heights of Polchishta and Beshishta, to the north of the Gradeshnitsa, and the place of the same name, which was fiercely defended by the enemy.

In the centre the Allies progressed on the ridges beyond Kozyak, and got a footing on the Kuchkov Kamen; the Serbs took Melynitsa, Vitolishta and Rasimbey, on the Cherna, about 15 miles from Prilep, and cut the communications of the Bulgars east of the river with that town, which was the advanced base of the Bulgarian 1st army. New Bulgar regiments, placed in the field that day, and supported by German units, failed to check the onrush of the Allies, who had advanced 12½ miles from their starting-point. Next day the advance had grown to 20 miles, for Serbian cavalry rode into Poloshko, on the Cherna, a few miles south of Vozartsi and Kavadar, both places which had leapt into fame during the attempt made by the British and the French to help the Serbians in 1915.

By September 18 a deep gap had been cut through the Bulgarian front, and the Bulgars, with their German friends, were retreating in disorder. The gap had been broadened as well as deepened. On the east, Blatets and Rojden had been stormed, and the Belashnitsa crossed, while the high mountainous zone of Gyurov Kamen had fallen to the Allies, who, in the centre, had gained complete possession of the great ridge of the Kuchkov Kamen. On the north-west the Cherna, from south of Zovik to north of Rasimbey, was being crossed, and

HOISTING THE UNION JACK AT KIRKUK AFTER ITS CAPTURE FROM THE TURKS, OCTOBER 25, 1918.

BRITISH EXPEDITION TO BAKU. On January 27, 1918, a force under Major General Dunsterville set out from Bagdad for Baku on the Caspian Sea to save the oil wells in the Baku district threatened by Bolshevist, Turkish and German forces. The photographs show: 1. Drilling Armenian troops. 2. Baku naval jetty with wireless station in background. 3. Populace awaiting their daily water-ration during the siege by the Turks.

the Serbians, marching on Prilep, threatened the envelopment of the Bulgars in the Selechka mountains. Setting fire to his stores and camps, the enemy made haste to retreat, but the swift, unrelenting pursuit of the French and the Serbs, particularly of the Yugo-Slavs, gave him no opportunity of throwing up fresh lines of defence, and his retreat rapidly turned into a rout. By this time he had lost 5,000 in prisoners alone, and the number of his killed and wounded was very heavy.

At five o'clock in the morning of September 18 the British, under General Milne, and the Greeks, under General Orfanides, attacked the positions of the Bulgarian 2nd army, which was commanded by General Lukoff, on the front west and east of Lake Doiran. An intense bombardment, lasting 48 hours and smashing into fragments the Bulgar trenches and wire entanglements, preceded the infantry assault, the principal part of the fighting being borne by the 22nd division, the 77th infantry brigade and the Greek Seres division. On the eastern slope of Pip ridge, British infantry drove the enemy back, but he brought up his reserves, and a ding-dong struggle ensued. In the centre British and Greek troops took the Bulgars' first line of trenches and Sugar Loaf hill after strenuous fighting. The Greeks enveloped Petit Couronné and stormed Hill 340; a Bulgar counter-attack drove them from the hill, which they retook with much gallantry.

By the evening the Allies held Doiran town and a considerable extent of the enemy's first and second lines, but had not maintained the ground on the left they had captured earlier; the operations of the British there, however, making the work of their comrades and the Greeks easier in the centre and on the right. The Allies took 800 prisoners; the Bulgars, on their side of the account, laid claim to 500 unwounded British and Greek prisoners. On the east of the lake, British and Greek forces advanced by night from the foot of the Krusha Balkans across the plain, and early in the morning captured by assault Akindjali and its strongly fortified position, proceeding thereafter north-west to Nikolitch, which they entered in the afternoon.

Heavy and sanguinary as the struggle had been on the 18th, it was not less so next day, the purpose of the Allies being not so much the gain of ground as the retention of the Bulgars on that front. The British again tried to win Pip ridge and open up the way to the Grand Couronné; but on the ridge, though they pressed forward with the utmost determination, they were

at length held up by nests of machine guns, and had to retire. They formed up again, and made a second effort, but in spite of their courage they were unable to take the position. Yet their main object—that of pinning the Bulgars of Lukoff's 2nd army to the east side of the Vardar—was completely accomplished. As was afterwards pointed out in a British official statement, the enemy had to use his reserves to restore his front, and no troops were able to leave the line in front of the British for the purpose of opposing the Serbs and the other Allies between the Vardar and the Cherna. The Greco-British offensive was a most material and effective contribution to Franchet d'Esperey's offensive in general.

That offensive west of the Vardar had continued, and on September 21 was seen to be developing into a really great victory. Advancing with extraordinary rapidity, considering the mountainous nature of the country, the Serbians, after breaking the serious resistance set up by Bulgar rearguards reinforced by German troops, passed through Vozarci and Kavadar, and reached the Vardar in the direction of Negotin and Demircapu, thus cutting the railway in the valley of that river. This brilliant achievement indicated an advance from the starting-point of upwards of 40 miles, and was full of menace for the Bulgars, not only on the west side of the Vardar but on the east side as well. Forthwith they began to destroy their stores and material at Gradsko and in the whole region of the Vardar and Lake Doiran.

In the eastern part of the Cherna bend the Bulgars began to fall back, and the Allies captured Chaniste and Orle, having crossed the Cherna at Chebren on the previous day. North and north-east of the Dzena ridge the Greeks, supported by French troops, made further progress. Meanwhile, more immediately east of Monastir, the Italians, under General Mombelli, had been attacking the enemy, who was commencing his retirement in that sector also; but on September 21 they caught him in the midst of his withdrawal, assaulted him with determination and made him retreat precipitately with very heavy losses in men and material. By this time the Bulgarians were in full flight on a front reaching from Monastir to Doiran, a distance of about 100 miles, and at all points the Allied pursuit was being methodically and energetically carried out, despite the opposition of the Bulgaro-German rearguards. In this

movement the Allied airmen rendered splendid assistance to the advancing troops.

By September 23 there was no shadow of doubt as to the overwhelming victory of the Allies. From Mogila, above Monastir, their line reached north-easterly to Kanatlartsi and Kalyani, south-east of Prilep. Farther north the Serbs, marching on Prilep and the Babuna pass, had reached the Vardar from Demircapu to Gradsko, some of their detachments being thrown across to the east bank of the river. South-east of the Serbians, Greek and British troops had advanced beyond Koynsko and Gurinchet, and occupied Gevgeli and all the first enemy line as far as Lake Doiran. Thus the Bulgarian 1st and 2nd armies, heavily attacked by land and from the air, were falling back in disorder everywhere. But, bad as that seemed for the Bulgars, it was not the whole truth—which was that the Serbians, by the brilliant rapidity of their movements, had completely separated the two Bulgarian armies, and there was no longer any cohesion between them. In about a week the whole military situation in the Balkans had been transformed. Most of the credit for this great achievement was due to the Serbians.

On September 24 the Bulgars and Germans, closely followed by the Allied advance guards, and harassed by cavalry and aeroplanes, were falling back in confusion towards Veles (Kuprulu), Ishtip, and Strumitsa. On the left wing the Allied forces, debouching from the Monastir front, were driving back the enemy on the Albanian roads. French cavalry entered Prilep, found the town intact, and seized immense quantities of stores. North-eastward the Franco-Serbians were beyond the Prilep-Gradsko road, and were threatening a large bridge-head east of Gradsko-Demircapu, and northward, on the line of the Bregalnitsa, were threatening Ishtip.

Farther to the east the British and the Greeks had advanced to Smokvista on the west bank of the Vardar, and to Furka and Pazarli on its east side; British cavalry were marching on Strumitsa. More German troops were now rushed up to assist in stemming the rout, but they did not stem in—the rout continued and grew more and more complete. The chief event on September 25 was the capture by the Serbs of the Popodiya Massif, to the east of the Babuna. Within the next 24 hours they held the famous pass, together with Veles and Ishtip, and took great quantities of booty, including a number of heavy

guns ; at the station at Gradsko, which was defended in vain by German troops, they discovered large stocks of welcome food and other supplies. Meanwhile the British had entered Bulgaria at Kosturino, six miles from Strumitsa, and with the Greeks were advancing on the south-west slopes of the steep Belashitsa range. By this time the Allies had taken 12,000 prisoners and more than 200 guns.

On the morning of September 26 the British entered Strumitsa, and British and Greek troops stormed the heights of the Belashitsa range, north of Lake Doiran. Moving up the valley of the Bregalnitsa, Serbian cavalry reached Kochana, about 20 miles north-east of Ishtip, and then pushed on towards the Bulgarian frontier, with the idea of reaching the Struma and enveloping the Bulgars in that area. Allied forces, advancing from Prilep, threw back the left wing of the German 11th army in the mountainous region west of Krushevo.

On the 27th Franchet d'Esperey announced that the Vardar railway and the road from Monastir through Prilep to Gradsko were completely cleared of the enemy, who was being unremittingly pursued northwards. His statement with respect to the Vardar railway indicated that the valley of the Vardar was no longer under the fire of the Bulgars and Germans. On that day the general advance of the Allies was everywhere pressed. On the west the resistance of the enemy between Lakes Prespa and Ochrida, and to the north-west of Monastir, was beaten down; from Krushevo the Allies were marching on Kichevo.

In the centre the Serbians from Veles were making an effort to reach Uskub, and had come within about 20 miles of it, notwithstanding a last despairing attempt of the Bulgars to hold them up; on their right Serbian cavalry had pushed on to within half a dozen miles of the Bulgarian frontier. On the east the British and the Greeks were advancing north of Strumitsa and the Belas range. It was now evident that Bulgaria's military position was hopeless, and, realizing this, she made overtures for an armistice.

CHAPTER 21

Italy's Triumph

THE decisive successes achieved by the Italians and Allied forces cooperating with them during June, 1918, when the determined, carefully planned and highly organized offensive of the Austrians was repelled and turned to defeat, had a marked effect on the trend of home affairs in Austria-Hungary.

Ever since the death of the aged emperor Francis Joseph in the latter part of 1916, that country had been in a state of unrest and disruption, with her repressed Slav communities demanding with growing vehemence an independence of the same sort as that enjoyed by Magyar Hungary and German Austria. This factor had harassed the Dual Monarchy in the earlier stages of the war, and later during the winter of 1917-1918 the country politically was a boiling cauldron. More than 20,000 Czecho-Slovaks, and a large number of Yugo-Slavs, once they were satisfied of sympathy with their national aspirations, surrendered to Italy, and fought shoulder to shoulder with the Italian troops; and the Austrian Germans and the Magyars, knowing all these facts perfectly well, had a deep-rooted hatred for the Slavs of the Dual Monarchy.

The second thing that made tension severe was hunger. As regards food, Hungary was much better off than Austria, but she would do little or nothing to supply the needs of her partner. In January, 1918, there had been strikes and food riots in Vienna and in other parts of the country. Prices of all commodities rose to an unimaginable height. The nobility and the rich bought what small supplies came on the market; the poor got hardly anything. This contrast was heightened by the fact that the rich for the most part kept out of the war; they went on with their usual life, as far as it was possible. The authorities did something for the poor, but it was utterly inadequate. The general state of the people of Austria as regarded food was starkly desperate.

If ever a country needed peace, that country was Austria-Hungary. The United States had declared war on the Dual

Monarchy, and sent some of their troops to the Italian front. In carrying out her share of the enemy peace offensive that winter it was to the American president that Austria, as well as Germany, appealed. On January 8, 1918, President Wilson made his famous speech in Congress, outlining America's peace terms—the "fourteen points." On the last day of the month Count Hertling, the German chancellor, endorsed some of the president's points, including the "freedom of the seas," and stated the German attitude with regard to the others—an arrogant and insolent attitude. On the same day Count Czernin, the Austrian foreign minister, made a speech somewhat toned down for Mr. Wilson's special benefit. Mr. Wilson saw well enough, of course, which of the two was the real voice of the enemy.

About 10 days later there was one more of the many political crises that constantly developed in Austria. M. Clemenceau, the French prime minister, had made public a letter written by the emperor Charles to his brother-in-law. In this letter the emperor spoke of the "just claims of France to Alsace." As soon as this document was published there was a tremendous outcry and uproar in Berlin. The genuineness and authenticity of the letter were denied, but Czernin disappeared from office. The bonds of iron which bound Austria to Germany were made stronger and heavier. This was at the moment when the German offensive of 1918 was in the full flush of success on the western front, and Austria had to follow where Germany led. In any case, the intrigues of Germany for a negotiated peace resulted in failure.

In May, 1918, the situation in Austria had become worse and worse. The common people were living on scraps of potatoes, mangold-wurzels, and anything they could pick up. All over the land there were ferment, strife, confusion. Bohemia was more urgent than ever in her demand for independence, and on May 3 Dr. von Seidler, the premier, announced that parliamentary government was impossible, and that a revision of the constitution was in contemplation by which Bohemia in particular was to be divided into national districts.

In August occurred an event which still further jeopardized the position, already severely shaken, of Austria. This was the formal recognition of the Czecho-Slovaks as Allies. On August 13 the British government issued the following declaration:

Since the beginning of the war the Czecho-Slovak nation has resisted the common enemy by every means in its power. The

Czecho-Slovaks have constituted a considerable army, fighting on three different battlefields, and attempting, in Russia and Siberia, to arrest the Germanic invasion. In consideration of its efforts to achieve independence, Great Britain regards the Czecho-Slovaks as an allied nation, and recognizes the unity of the three Czecho-Slovak armies as an allied and belligerent army, waging regular warfare against Austria-Hungary and Germany. Great Britain also recognizes the right of the Czecho-Slovak national council, as the supreme organ of the Czecho-Slovak national interests, and as the present trustee of the future Czecho-Slovak government, to exercise supreme authority over this allied and belligerent army.

Before this declaration, the French and Italian governments had concluded special military conventions with the Czecho-Slovak national council with respect to sections of the Czecho-Slovak forces which had been constituted in France and Italy. With its headquarters at Paris, this council had as its head Professor Masaryk, and was already an embodiment of Czecho-Slovak independence; the British government definitely recognized this council as the "present trustee" of the future state of the Czecho-Slovak nation. For Austria this recognition of the Czecho-Slovaks was a most severe blow which was to thrust the empire still more swiftly towards dissolution. Meanwhile, her ally was being subjected to a series of great attacks in France, and the German retreat was slowly beginning.

At this time Germany made efforts to obtain peace, and Austria-Hungary followed suit. Her overture took the form of a note addressed to all the belligerents and neutrals, and was also communicated in special form to Pope Benedict XV. In effect it invited the Allies to a non-binding, confidential conference at a neutral centre to discuss and examine the means of ending the war. She had tried to induce neutrals to act as mediators, but these attempts had come to nothing. There was not the least doubt that this Austrian move was prompted by Germany, whose strongest desire at that juncture was to gain time for the reorganization of her armies. For some weeks before the issue of this note the Austrian government had been endeavouring to get into touch with the Allied governments. Neither Germany nor Austria expected a negotiated peace, but they hoped that pacifist and defeatist efforts would be stimulated, and they thought that by the rejection of their offers the Allies would be represented as resolved on their utter destruction.

Within half an hour of his receipt of the message, Mr. Lansing, the American secretary of state, replied that the government of the United States would not " entertain any proposal for a conference on a matter concerning which it had made its position and purpose so plain." In a speech Mr. Balfour, observing that the note followed hard on a statement made by the German vice-chancellor in which there was to be found little or no modification of the attitude of Germany with respect to her war aims, said there was something cynical in the way in which the Austrians had made their proposals within a few hours of the utterance of that speech.

The American reply and the speech made by Mr. Balfour reflected clearly the views of the vast majority of the peoples of the entente and the United States ; and the Austrian peace note, regarded as a war manœuvre, completely failed. At the same time it did have its effect on the pacifists who viewed the Austrian move as an indication of that country's intention of breaking away from Germany.

So, after her failure to obtain respite, Austria had to continue the struggle. Early in October Count Burian, who had succeeded Czernin as foreign secretary, declared, in face of all the difficulties which had surrounded Austria, that her defensive strength would confront the enemy in the south with a " wall of steel." This was mere window-dressing, an effort to bolster up the waning morale of the people. There was no doubt that the breaking point was soon to be reached. Crisis followed crisis, and though the Austrian army was still regarded as a far from negligible force, the calamitous result of the second battle of the Piave, as has been said, profoundly shook the confidence and hopes of the Dual Monarchy.

After the successful operations of the Italian army during June and the early part of July there was a period of weeks with little or no activity. The opposing armies were ranged on the two banks of the river, the Allied forces on the west, the Austrians on the east side, with an advanced position on the small island of Grave di Papadopoli.

At this time the Italian command was severely criticized for not continuing to press the Austrians. The view was taken by the Allied command that as it appeared improbable that offensive operations would be undertaken for an indefinite time, some or all of the British troops who were then on Italian soil should be

withdrawn and drafted to France. In accordance with this plan the 7th, 23rd and 48th divisions were reduced by three battalions each, and the nine battalions thus released proceeded to France on September 13 and 14. A further development of this scheme of re-allocation was that the whole of the 7th division should be sent to the western front immediately, while a division from France should take the former's place with the Italians; a similar movement was intended also for the 23rd division.

Two factors, however, prevented this plan from being executed. In the first place the tactical situation in France at that time called for all available rolling stock and other transport, so that the exchanges were of necessity postponed from day to day. Meanwhile, the situation in Italy was undergoing a change, and when Diaz finally revealed his plans for a renewed offensive, the transfer scheme was cancelled, and the three British divisions remained in that country.

On September 25 orders were issued for the rapid concentration of Allied troops on the middle of the Piave. General Diaz had made his plans with due regard to the state of affairs on other fronts besides his own. The situation in France, for example, suggested that assistance from the German army for the Austrians was improbable. In Macedonia the Allies had just broken up the Bulgarian line and routed the Bulgar army, so that all hope of their reorganizing and making a further stand was gone. Their final surrender and the annihilation of two Turkish armies produced a further and imminent menace to the Dual Monarchy in the south-east. It was clear that the time had come for Diaz to strike. His objective, as he revealed, was nothing short of the breaking up of the entire Austrian front. In all, the Italian force comprised 51 Italian divisions, 3 British, 2 French, 1 Czecho-Slovak division, and the 332nd American Regiment. The proposed attacking force of 22 divisions was divided into four armies; two of these were commanded by Generals Caviglia and Giardino, one by General the Earl of Cavan, and the fourth was under the French general, Graziani. The enemy forces amounted to 73½ divisions, a formidable number, but they were inferior in strength as regards artillery.

It was the 10th army that Lord Cavan commanded, and on October 11 its headquarters were established at Treviso. In the first place, it consisted of the Italian 11th corps, under General Paolini, and the British 14th corps, commanded by Lieutenant

General Sir J. M. Babington. The 48th division remained on the Asiago plateau, commanded temporarily by the head of the Italian 12th corps, General Pennella.

Lord Cavan details the plan of attack in his dispatch thus:

> The general plan for the main attack was to advance across the Piave with the 10th, 8th and 12th Italian armies—to drive a wedge between the Austrian 5th and 6th armies—forcing the 5th army eastwards and threatening the communications of the 6th army running through the Valmarino valley. The Italian 4th army was simultaneously to take the offensive in the Grappa valley. The task allotted to the 10th army was to reach the Livenza between Portobuffole and Sacile, and thus protect the flank of the 8th and 12th armies in their move northwards. The co-ordination of the attacks of the 10th, 8th and 12th armies was entrusted to General Caviglia, the commander of the 8th army.

The Italian corps already held a sector on the Piave stretching from Ponte di Piave to Palazzon; the British were rushed down from the mountains to the Treviso area on October 16. Cavan's forces had to cross the Piave, and how this was to be accomplished was a difficult problem. The breadth of the river on the front of attack was about a mile and a half, in a series of channels interspersed with islands. The main island, which was held by the Austrians as an advanced post, was the Grave di Papadopoli, some three miles long by one mile broad. The current varied according to the channels, running in the principal channel at the rate of more than 10 miles an hour in time of flood, and never dropping below three and a half miles an hour at summer level.

On October 21 the British came into line by taking over from the Italians the northern part of the front the latter had held, extending from Salettuol to Palazzon. To conceal this change from the Austrians, all troops visible to the enemy wore Italian caps and cloaks, and orders were given that no British gun was to fire a shot before the general bombardment. Lord Cavan decided to occupy the island of Grave di Papadopoli previous to the general advance on the front. The Piave was in full flood, which not only made reconnaissances of the river-bed impossible, but also suggested the probability of changes in the main channels; yet on the night of October 23-24, men of the Honourable Artillery Company and of the Welsh Fusiliers, without any previous artillery preparation, crossed the main channel, which was like a torrent, surprised the Austrian garrison, and

occupied the northern half of the island. It was a wonderful feat. How it was done was told by a correspondent:

> A special fleet, full 50 of them, of a particular type of small, flat-bottomed boat was constituted under an "admiral," an Italian officer named Odini. Sailors and engineers who knew all the treacherous and dangerous currents of the river, which is always shifting and changing, were put in charge of these boats, which held half a dozen men in each. At some points several streams had to be crossed from islet to islet, so that a relay system had to be adopted, 10 boats going over and back, while others filled up the gaps. The crossing was made in the night, and the surprise was so complete that part of the garrison were caught in their sleep, and the Welshmen were well entrenched before the Austrians on the farther bank were alive to the situation. They attacked then, however, with undeniable vigour and courage, sending reinforcements over promptly, but were firmly held, and by midday the whole north of the island was in our hands, and 700 prisoners had been taken.

In his dispatch Lord Cavan spoke highly of the services rendered by the Italian engineers in the transport of the troops by boat and in the subsequent bridging of the river, and declared that it was impossible to overestimate the value of their help. On the night of October 25-26 the conquest of the island was completed by a combined movement of the British 7th division from the north and the Italian 37th division from the south. The Austrians put up a fight, but they withered away under the sustained machine gun and rifle fire of the British. This successful operation placed the main channel of the Piave behind the British, and enabled them to begin their bridges and preparations for the main attack in comparative security.

General Diaz began his offensive on the Piave with a tremendous bombardment of the Austrian front at 11.30 on the night of October 26. Up to that moment not a single British gun had opened fire on the enemy. Both heavy and field artillery were registered by the 6th Field Service Company, R.E., and they did their work well, for the bombardment and the subsequent barrage were excellent. In the Monte Grappa sector a change in the original plan of Diaz had been shown by the Italian 4th army, which was commanded by General Giardino, beginning a vigorous attack on the Austrians on October 24. In mist and rain, which prevented a barrage, the Italians did not hesitate to assault a line of fifteen miles of mountain heights

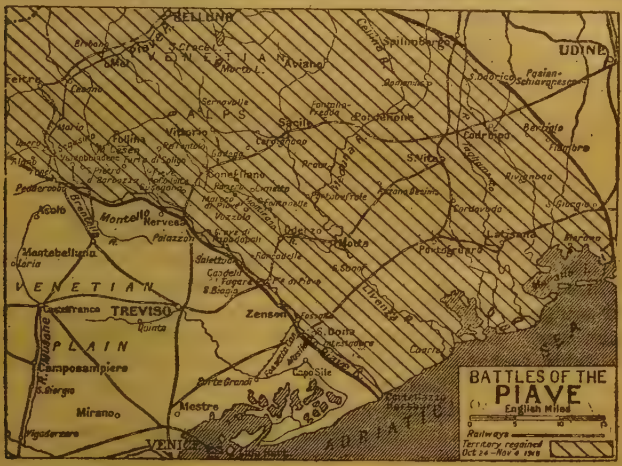
between the Brenta and the Piave. In this way did they commemorate the first anniversary of Caporetto. On the 26th the action was renewed by the Italians, who, after very bitter fighting, succeeded in capturing Monte Pertica.

At 6.45 a.m. on October 27 Cavan launched the attack of the 10th army against the enemy defences east of the Piave. On the right the Italian 11th corps, under Paolini, attacked, with the 23rd Bersagliere division, commanded by General Fara, on its right, and the Italian 37th division on its left. On the left the British 14th corps attacked with the 7th division, under Major General T. H. Shoubridge, C.B., C.M.G., D.S.O., on its right, and the British 23rd division, under Major General H. F. Thuillier, C.B., C.M.G., on its left. The British attacking troops moved up from the western side of the island of Papadopoli, in the midst of a deluge of rain, and reached the eastern bank by half-past five in the morning.

When the signal to advance came they plunged into the river, and struggled forward in the cold and furious current. Those who first reached the east bank of the Piave stretched out an arm to those nearest them; they in their turn held out a hand to those behind them, and so chains were formed until all were across. Then they had to force their way up to a line of thick-growing acacia trees, which the Austrians had joined with wire to make a barricade. They then stormed an embankment filled with machine guns, and carried a series of entrenched blockhouses. In many cases the defenders fought courageously, in others they yielded after a short struggle. For the most part they proved to be Hungarian soldiers. The advance of the British was pushed forward with the utmost determination, and before the night fell a large bridge-head had been gained and consolidated, and half a dozen villages were in their hands.

In this attack the Honourable Artillery Company and the Welshmen were the first to reach the farther side of the river. Later they gave place to larger and stronger formations. During the day the engineers threw two bridges across the river. Six miles away the Italian 8th army had also effected a landing, but was less fortunate with its bridging operations. Thereupon General Diaz allotted the Italian 18th corps to Lord Cavan, with a view to passing it across the Piave by the British bridges, whence it was to attack northwards and clear the front of the Italian 8th army.

In the morning of October 28 Cavan renewed his attack on the Austrians, and by the evening his army had made a considerable advance, his patrols pushing towards and up to the Monticano. The hold of the enemy on the high ground about Susegana weakened, and during the ensuing night the right wing of the Italian 8th army crossed the river about Nervesa, the 18th corps rejoining it; and Cavan's rapid forward move was resumed next day, his whole army reaching the Monticano from Fontanelle to Ramera. Much of this quick advance was due to the vigorous action of the 14th corps mounted troops, who rode on in front of the infantry and secured the bridge intact over the



Monticano between Vazzola and Cimetta. By the evening of the 29th the Austrian defence showed manifest signs of crumbling, and numerous fires in rear of the enemy lines suggested that a far-reaching withdrawal was contemplated.

The Bersaglieri, who had been with the British, joined the Italian 3rd army and were replaced by another Italian regiment. In face of resistance, passages of the Monticano were forced on the night of October 29-30. To quote Lord Cavan: "From that moment the defeat became a rout." On the 30th the British reached the Livenza, and crossed it next day. Part of the Italian forces crossed the lower Piave, and on October 31 were

advancing rapidly to the same river, which was bridged by the British on November 1, while Italian cavalry went in hot pursuit of the retreating Austrians. On the 3rd, Cavan was on the Tagliamento ; and on the following day Austria, utterly defeated, was out of the war. Inside a week the British, in their victorious advance, took 28,000 prisoners and 219 guns.

The British 48th division had remained on the Asiago plateau, and formed part of the Italian 6th army. On October 30 it was discovered that the enemy had withdrawn on their front, and the division followed up and took Monte Catz and Monte Mosciagh. By November 2 they had reached Vezzena, and were in consequence the first British division on the western front to enter enemy territory. By November 6 the leading companies were in the outskirts of Trent. Up to November 4 the pursuit of the routed Austrian troops continued ; the remnants of this once-powerful army were driven far into the mountains in the north, and on the plains straggling units were harassed and pursued by cavalry as they continued their hurried retreat.

In an official communiqué, dated November 4, a condensed account in respect of this final blow delivered against the Austrians made plain how great had been the victory. Six hundred thousand prisoners with commands complete had been captured ; 7,000 guns and vast quantities of material, supplies and equipment had been taken. It was the biggest haul of the entire war. The seeking of an armistice by the Austrians was inevitable, and at three o'clock in the afternoon operations ceased along the whole Italian front. The negotiations to this end took place at Villa Giusti, near Padua.

The Italian terms comprised two principal stipulations: first, that in addition to enemy troops evacuating all Italian territory, they should leave also that territory assigned to Italy by the Treaty of London. Secondly, all Italian prisoners of war were to be liberated and repatriated without reciprocity.

Some time before the armistice was signed the Italian soldiers had penetrated beyond the old frontier in the central front to the west, and in addition to Trento, the Val Sugana and Rovereto had been reached. General Petitti di Roerto had taken troops by sea to occupy Trieste, and on the day the armistice conditions came into force, Grado, Aquilcia, Cervignano, Cividale and Gorizia were re-occupied ; units were also distributed to the islands of Lussin, Maleda, Curzola and Lagosta and certain

Istrian ports. During the days that followed the Italian occupation proceeded rapidly elsewhere. An Italian detachment with a battalion of American soldiers entered Fiume, led by General di San Marzano. Innsbruck and Landeck were occupied, as were Bozen in Tirol, Sebenico in Dalmatia, the Brenner pass, Pirana and Muggia. Then on November 24 Italian patrols scaled the peaks of Vetta d'Italia and the Pizzo dei Tre Signori and there hoisted the Italian flag.

So Italy, who had entered the war 10 months after the other Powers, brought her own struggle to a victorious conclusion seven days before the cessation of hostilities in France. But it had cost her 496,921 lives, and left her with 219,145 permanently disabled men.

CHAPTER 22

Conquest of Palestine and Syria

In the middle of September, 1918, the Palestine front was almost identical with that which had been established after the capture of Jericho in February. Throughout the late spring and the summer no movement of any size had taken place, and since the repulse of the Turkish attack on the Jordan bridge-heads in July, fighting had been of a minor nature. The southern half of Palestine had been conquered, and the British line had been consolidated. It appeared to many that, in spite of the successes so far recorded, deadlock had been reached. So far was this from the fact, that, although Allenby only renewed his offensive on September 19, his troops were in Aleppo, 350 miles north of Jaffa, by the end of October. This astonishing advance was made possible by a victory which must rank among the greatest in the whole war.

It will be remembered that the British commander-in-chief's plans for a decisive offensive in early summer were brought to nothing by the demands which the western front made upon his forces. The delay, however, proved useful, for it enabled him to perfect his plans.

If he wished to deliver a really smashing blow to the Turkish armies opposing his advance he was confronted with a number

of complexities. To begin with, the front on which he operated extended theoretically from Medina to Jaffa. The enormous length of the right wing, however, could be disregarded, and for practical purposes he could concentrate on a front stretching from Arsuf, north of Jaffa, through a point on the Jordan south of Nablus, where it bent back southward to the Dead Sea. South and east of the Dead Sea the operations were of a minor character. Any hostile troops in that area would be trapped if disaster overtook their armies to the north of the Dead Sea.

Along his real front Allenby's left wing was pushed well in advance of his centre and right. The left wing lay on the coast in the plain of Sharon, which farther north widened out into the plain of Dothan, and farther north still, through the Musmus pass, into the plain of Esdraelon or Megiddo. Such country was admirably suited to the employment of cavalry, and Allenby's enormous superiority in that arm could only be fully exploited by utilizing that area. To the east the Judean hills and the valley of the Jordan were country in which only infantry could operate successfully, and even then with great slowness.

Opposing his left and centre were the Turkish 8th and 7th armies with the Asia corps in reserve. On his extreme right the Turkish 4th army resisted his advance eastward across the Jordan, and stretched southward on the eastern side of the Dead Sea as far as Medina. Allenby's plan, if successful, would involve the practical annihilation of those three armies. In the almost roadless and hilly country of Palestine the strategic importance of the railways can scarcely be overestimated. The Turks, in the event of a serious reverse, would be practically dependent upon the railways for retreat. If those vital arteries could be cut, the fate of the Turkish armies would be sealed.

The main line ran south from Aleppo to Damascus and down to the Hejaz. It passed to the east of Galilee and the Dead Sea and ran through Der'a, Amman and Maan to Medina. At Der'a, the most vital junction in Palestine, a branch ran westward through Samakh, on the southern shore of the Sea of Galilee, then south over the Jordan to Beisan. At Beisan it swung west again to El Affule, and then continued direct to Haifa and Acre. El Affule was the junction for the Palestine railway which ran south to Sebustiye (the ancient Samaria) and thence one branch south-east to Nablus, the other west and then south through Tul Karm to Lydda, Jaffa and Jerusalem.

After Der'a, El Affule was the most vital point, and after that, Sebustiye. If the line were cut at Der'a the retreat of all the Turks was barred. If it were cut at El Affule then neither the 8th nor the 7th armies would get through to the Hejaz line. To cut the line at Subustiye and Tul Karm was still to cut off great masses of Turks. But between Allenby and any of these strategic junctions lay three strong Turkish armies behind well fortified positions.

Allenby's forces numbered in fighting strength about 70,000 men with 540 guns. The Turks could muster barely 35,000 or 40,000 fighting men with 370 guns, and of that number some 8,000 or more were scattered in the far south and north, and would be unable to take part in the main battle. There was little doubt, therefore, that the British could not only break, but also rout, the Turks. But Allenby was hoping for something more: the Turkish armies had to be captured.

The plan which was eventually evolved was as simple as it was dramatic. The great strength of the infantry was to be concentrated on the coast and in the centre. Only a thin line of troops was to hold the right wing. With this overwhelming body on the left a smashing attack was to be delivered, and as the resistance was broken down the troops were to pivot on a point in the centre of the line and swing north-east. The extreme left of the line was to strike at Tul Karm, over 12 miles from its starting point. By this means the Turks would be forced eastward; but, as the attack progressed, so the centre of the British line was to move slowly forward, compelling the enemy to retire north as well. The far right flank was, meanwhile, to make a sudden thrust forward between the Turkish 7th and 4th armies, and thus close the Jordan crossings to all Turkish forces on the west of the river. In this way the greater part of the Turks would be surrounded on three sides.

The main point of the plan was that which was designed to close the fourth and only open side. After the infantry on the coast had flung back the Turks to the east, the masses of British cavalry which were to be collected behind the lines were to strike northward up the plain of Sharon immediately the corridor became wide enough for them to go through. Their objectives were to be El Affule and Nazareth, the Turkish headquarters, and after cutting the railway at the former place a cordon was to be flung due east across the country to Beisan,

then pushed south down the Jordan to link up with the line of British troops pushing up it from the south. While these operations were being carried out a section of the Arab army which, under the Emir Feisal, was pressing the Turks round Maan, should strike to the far north and endeavour to capture Der'a. If all these movements could be completed the 7th and 8th armies would be surrounded and the escape of the 4th army would be cut off. Allenby was planning to fling a net right round his opponents. The crucial question was how far and how fast the cavalry could move. Their most distant objectives were in some cases over 50 miles away ; and if the Turks were to be trapped those objectives had to be seized within very little more than 24 hours after the beginning of the infantry attack on the coast.

The plan was a stroke of genius, but the difficulties in the way of its successful execution were enormous. The chief difficulty would be the question of supply. The whole force would be advancing very rapidly over a large front, and the farther it went, the farther it would be from its base. In particular the great sweep of the cavalry would carry them many miles from their depots. Transport at once became an acute problem, and tremendous efforts were made to increase its capacity and improve its mobility. Apart from the problems concerning road making, ammunition supply, evacuation of the wounded, signalling and communications and similar questions, it was clear that the proper co-ordination of such large bodies of troops over such a vast battlefield would tax to the limit the abilities of the staff. In consequence, the activities of every battalion had to be planned in the most minute detail, and in particular the rôle of the cavalry was prepared with meticulous care. Yet except in a few and unimportant initial operations it was impossible either to rehearse the parts to be carried out or even to communicate the plan to divisional commanders. Complete surprise was absolutely essential, for if the Turks got even the least rumour of what was toward they would at once withdraw, and the whole plan would miscarry.

To deceive the Turks and to lull their suspicions the most elaborate measures were taken. It was given out that an attack was to be made up the Jordan valley, and mock preparations were made on a large scale. A vast camp of empty tents was pitched, and rows of bushes were covered with horse

blankets. Especial precautions were taken to conceal the movement of troops from east to west. All such movements were carried out at night, and bombardments were started to cover any noise. After daylight the camps on the sea coast were absolutely still, no movement of men or horses being permitted. Months in advance these camps had been pitched, each one of them far too large for the numbers of troops then occupying them, and the gradual increase of those numbers was absorbed without any apparent extension. The greatest asset to this concealment was the British air force, which during August and September practically drove the Turkish machines from the sky and prevented any aerial observation.

In the command itself the very greatest secrecy was preserved. Even the War Office was not notified of the intending operations until they were about to begin, and the divisional, brigade and battalion commanders were only informed of the parts they would have to play a few days before the event. The whole scheme was conceived and planned by General Allenby in person, and its astonishing success was the result of his genius for organization combined with most remarkable foresight.

By September 17 the final concentration of the British forces was completed. On the extreme right a small composite force under the command of Major General Chaytor was left to defend the valley of the Jordan and protect the bridge-heads. Next to that on the west came the 20th corps under General Chetwode. Its two divisions, the 53rd and the 10th, were on the east and west of the Nablus road respectively. The gap between them was filled by another small composite force under Lieutenant Colonel Watson, whose duty was to hold the centre while the divisions on either side made converging attacks.

The great bulk of the British strength lay, however, on or near the coast. Here were concentrated the 21st corps under General Bulfin and the Desert mounted corps under General Chauvel. The infantry, who occupied a line extending from the left flank of the 10th division at Rafat to the coast at Arsuf, were arranged in the following order: On the extreme right was a French detachment under the orders of the 54th division, which was situated between it and the Tul Karm-Lydda road. These two units were to drive up north and east towards Bidya and Azzum, where were the headquarters of the Asia corps. West of the road came the 3rd (Lahore), the 75th, the 7th (Meerut), and, on

the coast itself, the 60th, divisions. Their orders were to drive north and then swing east against various points on the Tul Karm-Lydda road, driving back the Turks and opening a corridor for the cavalry. The most arduous task was allotted to the 60th division, for not only had it to smash the Turkish positions on the shore itself, but thereafter it had to push on straight to Tul Karm, over 12 miles to the north-east, and this all had to be done between daybreak and dusk. To aid in this task it was allotted the 5th Light Horse brigade, whose orders were to precede the infantry, and, after taking Tul Karm, to push on eastward and cut the railway at a point north of Sebustiye.

Behind this vast concentration of the 21st corps lay the Desert mounted corps, upon which Allenby relied for the final success of his plan. It consisted of the 4th cavalry division (less the 5th Light Horse brigade, already under orders), the 5th cavalry division and the Australian mounted division. As soon as the infantry had cleared their path the 4th and 5th divisions were to move off northward, the former slightly inland, the latter along the coast. At Liktera they were to branch off: the 4th was directed to secure the Musmus pass into the plain of Megiddo, which was the key position of the whole battle, and then, pushing on, to capture El Affule, on the railway.

The next day they were to fling their cordons east to Beisan, and south down the Jordan valley. The 5th division was to ride straight at Nazareth. Liman von Sanders and his staff were known to be there, and it was hoped that the cavalry would be able to effect a surprise capture. The next day they were to strike north-west at Haifa and Acre, and to lend assistance to the 4th division in its task of intercepting the Turkish armies which would be streaming northward and eastward, rolled back by the 21st and 20th corps far to the south. Following closely on the heels of the 4th and 5th divisions the Australian mounted division was to shepherd along the pack transport trains to be sent forward as soon as the cavalry were through, and to cooperate with the 4th division in capturing Turkish stragglers and intercepting large columns. The air force was to cooperate closely with these movements, and in particular to bomb all the roads leading north and east, blocking them wherever possible.

Such, in some detail, were the duties before the British force on the morning of September 18. Yet, in spite of the vastness of

the operations about to begin, and the disaster which threatened them, the Turks remained completely ignorant of their imminence. Not even when they were driven reeling northwards were they aware they were running on destruction. The whole plan was a complete and utter surprise, and so deeply were the Turks deceived that a map captured at their headquarters gave the positions of the British troops on September 17 as being exactly what they had been over a month before. In other words, the Turks were completely ignorant not only of the coming attack itself, but even of the massed concentration on the British left.

The main attack through the plain of Sharon was timed to begin at 4.30 a.m. on September 19. But in order to co-ordinate the movement of the troops and, if possible, to induce the Turks to weaken their right, the 20th corps began to attack through Mount Ephraim on the previous evening.

On the right, east of the Nablus road, the attack was conducted by the 53rd division, consisting of Welsh and Indian troops, with a Cape (coloured) battalion. During the night of September 18-19 this force marched across the difficult hilly country, passed the watershed, drove the Turks out of their positions, and captured El Mugheir, on the road from Nablus to the Jordan, and commanding several of the fords of that river. The 10th division, operating to the west of the road, stormed a series of fortified hills north-east of Tell Asur, and advanced to a point about three miles east of Turmus Aya, which lay two miles from the road. Between these two converging attacks, Watson's force stood firm on its extended front.

At half-past four o'clock in the morning of September 19, Allenby, after a short but terrific bombardment, launched his main attack from the coast to Rafat, while British warships cooperated from the sea with their fire. As soon as the guns belched forth, the infantry swarmed "over the top," and had gone a long way towards the enemy entrenchments before the Turks, taken completely by surprise, could put down a barrage. Close to the coast, London and Indian troops swept over the sand-dunes and turned the Turkish flank. On the right of the Londoners other Indian soldiers assaulted and carried a deep series of trenches well placed among low hills. East of these Indians, West Countrymen, with still more Indian troops, broke through the Turkish lines, and early in the day pushed on as far

as Miskeh, a short distance from Et Tireh, one of the enemy's strongholds, which was captured afterwards.

Farther along the front, British and Indian troops stormed the trenches before them, and, joined by East Anglians, who had routed the Turks immediately opposed to them, stormed Qalqilye, in spite of a most stubborn defence. Still farther east, at the end of the front thus heavily assailed, French contingents worked north of Rafat towards the Wadi Azzun. Everywhere rapid progress was made, and in three hours the entire hostile defensive system was overrun; everywhere the Turks were retreating, having lost hundreds in prisoners.

By half-past seven o'clock that morning the infantry had cleared the way for the cavalry. Starting off at a gallop, the 5th cavalry division rode northward along the coast over roads deep in dust and sand, got across the Nahr-el-Falik, and presently were over the Nahr Iskanderuneh, another wadi farther north. By midday they were at Liktera, a road junction, about 20 miles from their front in the morning. Passing over the branch railway, with its northern terminus at El Marah, they advanced north-eastward among the hills south-east of Mount Carmel, and marched on towards the plain of Esdraelon, the Armageddon of the Apocalypse, their objective being Nazareth. The 4th division, also composed of Yeomanry and Indians, moving a little east of the 5th, passed over the Turkish lines at Tabsor, and made off in the direction of El Affule, the vital junction of the Central Palestine railway, with the railway from Haifa and Acre. During the night it marched through the Musmus pass, which, by a remarkable and fortunate oversight, the Turks had failed to defend. The net had been well flung.

Meanwhile, the Australian 5th Light Horse brigade which, it will be remembered, had been detached for service with the 60th division, had occupied Tul Karm, and after handing it over to the infantry, who reached it late in the evening, had pushed on eastward and reached the main Tul Keram-Masudiye railway and road in the vicinity of Anebta, cutting off large bodies of the retreating enemy, with guns and transport. A night march through difficult country carried the brigade to the main railway line north of Sebustiye. The line was cut, and one further road of retreat was barred to the Turks. For the Turks the full tale of the day's disasters included the loss of upwards of 3,000 men who were taken prisoners.

By the evening of September 19 it was plain that Allenby's plan was developing into a sweeping victory with amazing rapidity. Next day's operations, which practically concluded the battles of Sharon and Nablus, made Allenby's tremendous success still more apparent. The pressure of his infantry was mainly exerted eastward from the coast and north towards Nablus. West of it the troops advanced in the direction of the town, beating down all opposition, until in the evening they stood on a line almost due north and south, from Bir Asur, through Anebta, Beit Lid, and Baqa to Bidya, about five miles above Rafat.

A stern struggle took place for the possession of Beit Lid, a height about 5,000 yards from the station of El Masudiye. After it had been captured an advance was made on the station, but this involved taking another dominating hill. In the moonlight a battalion of Sikhs stole up its slopes, and surprising its defenders, who included German machine gunners, rushed the position, and captured 200 prisoners. While Allenby's left wing had thus got astride the railway well to the east of the Tul Karm-Lydda road, and the roads converging on Nablus from the west, the 20th corps, marching over the very trying country west of the Jordan, and overcoming considerable resistance, reached a line stretching from Khan Jibeit, north-east of El Mugheir, and about five miles east of the ancient Shiloh, to Es Sawiye, on the west side of the Nablus road, three miles above the village of El Lubban, and some eight miles from Nablus itself.

By this time Turkish resistance had almost ceased. The Turkish 7th and 8th armies had been overrun and routed, and were streaming north and north-east by all available roads. Their retreat by railway was cut off, and every road soon became packed with masses of fugitives. Here was the opportunity for the air force. At selected points on all the main roads bombing attacks soon piled up a barrier of wrecked transport wagons, guns and limbers that speedily became further choked with bodies of man and beast. The confusion was frightful, and the retreat soon became a rout, the panic-stricken Turks fleeing blindly. Only the Asia corps managed to preserve some cohesion, Colonel von Oppen, after being driven from his headquarters at Azzun, showing great coolness and military skill in extricating the majority of his command from the general chaos and leading them north-east towards the Jordan. Little did he know at that time that he was marching to destruction.

So thorough had been the co-ordination of the attack, and so successfully had all communications been cut, that even 24 hours after the battle had begun, Liman von Sanders in Nazareth was quite ignorant of his personal danger.

During the night of September 19-20 the 5th cavalry division, who had advanced into the hills east of Mount Carmel, reached the plain of Esdraelon, and, marching across it in the early morning of the 20th, climbed the height on which Nazareth stood. The German clerks at headquarters staff, although utterly surprised, made a plucky fight with their revolvers, but the cavalrymen, charging into the town, took it with 2,300 prisoners. The mayor stated that Liman von Sanders had quitted the town the previous evening, but the statement was untrue, the general barely escaping by motor-car, having been woken up by the sound of the first shots. Among the prisoners were many German telegraphists, mechanics and other technical troops. In this area Allenby's cavalry had covered upwards of 50 miles in 24 hours, and not without stiff fighting at several points.

Not less remarkable was the performance of the 4th cavalry division, whose objective was El Affule. After successfully traversing the Musmus pass during the night, this force encountered and routed a strong body of the enemy at El Lejjun, the ancient Megiddo, on the edge of the plain of Esdraelon, and about eight miles south-west of El Affule. This Turkish force had been dispatched almost a day earlier to occupy and defend the pass, but their dilatory progress had enabled the British cavalry to get through. Advancing into the plain, a regiment of Indian lancers, acting as advance guard, was given such an opportunity as all cavalrymen desire. The action was thus described by a press correspondent:

> A Turkish battalion was lightly dug in on a flat about two miles from the entrance to the pass. The Lancers dashed out of the narrow defile, extended, and, galloping over this part of the plain of Armageddon, crashed into the infantry machine gunners with the lance, killing 90 and wounding as many more. They took 410 prisoners. The charge was most brilliantly executed The cavalry had to gallop over exposed ground against heavy rifle and machine gun fire, but they never faltered, each wave of horsemen riding through the enemy. Those who were not killed threw up their hands.

After this smart affair the column moved across the plain to El Affule, which, with its garrison of 1,500 men, was quickly

captured. At this railway junction an immense amount of booty was taken, including eight locomotives, two complete trains, 40 lorries and a large quantity of stores. The main body of the division then marched up the valley of Jezreel to Beisan, occupying the railway and taking about 1,000 prisoners. The 19th Lancers struck up north, and got into Jisr el Mujamia, where the railway from Der'a crosses the Jordan, about six miles south of the Sea of Galilee (Lake Tiberias), and thus made a further breach in the possible lines of Turkish retreat. Many of these cavalrymen had marched 70 miles in the two days—a great record in the circumstances.

By eight o'clock in the evening of September 20 the enemy resistance, General Allenby reported, was collapsing everywhere, except on the Turkish left in the Jordan valley. All avenues of escape for the defeated Turks were closed, with the exception of the fords across the Jordan between Beisan and Jisr ed Damieh, and on the north the cavalry were collecting the disorganized masses of the enemy and their transport as they arrived from the south. Already more than 8,000 prisoners and 100 guns had been counted among the booty, in which also were immense quantities of both horse and mechanical transport, four aeroplanes, many locomotives and much rolling-stock.

The great battle was ending in a debacle. There was no doubt about this next day, when Allenby made further gains, and the number of prisoners rose to 18,000 men, but the victory was already won, and all that remained to be done was the gathering up of the fragments of the Turkish 7th and 8th armies.

By the evening of September 21 the 7th division had captured Sebustiye, and the 5th Light Horse brigade had pushed through Nablus and made contact with the troops of the 20th corps which had advanced from the south. By nightfall Allenby's left wing, having swung round from Bir Asur, had extended its line east as far as Beit Dejan, about 10 miles south-east of Nablus, and was shepherding the Turks on, and west of, the Nablus road into the arms of the cavalry operating south from Beisan and Jenin. The latter place, on the railway and a centre of roads, about 12 miles south of El Affule, was attacked both from the north and west by Yeomanry and Indians and by the Australian Light Horse. On the western outskirts the Australians charged an entrenched Turkish battalion, sabring many of the enemy and capturing 1,000 prisoners. Jenin, in which were not a few

Germans, held out for a time, but was in British hands completely early on September 22.

From Nablus some Turkish contingents vainly attempted to escape into the Jordan valley in the direction of Jisr ed Damieh, which was still held by their forces, but they were caught by Allenby's airmen and thrown into wild disorder. Shortly afterwards Chaytor's force, which had been inactive up to this moment, seized Jisr ed Damieh and closed this exit, taking 800 prisoners, among whom was the staff commander of the Turkish 53rd division. On September 22 Nablus was occupied by French mounted troops and the Australian Light Horse.

On the same day Allenby announced that the Turkish 7th and 8th armies had virtually ceased to exist. Already some 35,000 prisoners had been taken with 260 guns, and the problem of guarding and feeding this vast host was taxing the resources of the overworked cavalry to the utmost. The only avenues of escape not yet closed to them were the fords over the Jordan between Beisan and Jisr ed Damieh. The 11th cavalry brigade was therefore dispatched south from Beisan on the 23rd, and although by this time numbers of Turks had got across, most of them part of the Asia corps, many thousands were intercepted, and by the evening of the 24th the net was complete, the 11th brigade having made contact with the cavalry of the 20th corps pushing up from the south. A cordon of troops had been thrown completely round the 7th and 8th armies. That the demoralization of the Turks was complete is illustrated by the fact that hundreds would surrender to the handfuls of British cavalry which they encountered. The line held by the cavalry was so long that their numbers became insufficient for the task, and had the Turks possessed any resolution, their massed columns could time and again have broken through. As it was, in one instance a body of 2,800 surrendered to a British lieutenant and 23 men.

In the north Allenby's cavalry occupied Haifa and Acre on September 23 after slight opposition. Two or three days later, cavalry occupied Tiberias, Semakh, and Es Samrah, on the shores of the Sea of Galilee, notwithstanding the determined resistance of their Turkish garrisons. Especially at Tiberias the enemy struggled hard but fruitlessly. The conquest of the Holy Land, except on the east side of Jordan, was now nearly complete, and Syria lay open to invasion. Damascus, its capital,

the great city of immemorial age, which formed the Turkish base, was only 70 miles away. But the Turkish 4th army east of Jordan had still to be destroyed. As early as September 17 Colonel Lawrence and the Arabs had begun their attacks on Der'a. South of the town the line was cut in three places, and both on the west and north further breaches were made. But the place itself was strongly defended, and every assault was beaten off.

As the days passed, however, it became less important; for although the line was repaired to the west by German troops who fought off the Arabs with great coolness, the railway was paralysed by the destruction wrought on the north and south. Der'a was finally captured on September 27, but long before this the position of the Turkish 4th army had become desperate. It was strung out along a long line from Der'a to Medina, but its main concentration point was between Amman and the Jordan.

On September 22 signs were not wanting that it was retreating from the river towards the Hejaz railway, by which it expected to escape to the north. The pursuit was taken up by Chaytor's force, consisting of Australian, New Zealand, West Indian and Jewish troops, the last-named being the Jewish battalions of the Royal Fusiliers, which had been raised in London during the previous winter, and augmented further by Palestinian Jews after their arrival in the country. Part of the Australian mounted division, whose former experience of the terrain stood it in good stead, got into Es Salt by a movement across the hills that threatened the enemy's flank and occupied that town after slight fighting on September 23, capturing more than 600 Turks and Germans, and a long-range naval gun which intermittently for months had shelled Jericho.

Next day the Australians were marching on Amman, the Australian Light Horse advancing on the wings, with the New Zealand Mounted Rifles in the centre. One party got astride the railway above Amman and derailed a train full of troops. Storming the crest of a dominating height, the New Zealanders rushed this central point on the railway on September 26 in the face of heavy machine gun fire. The Turks, with whom were many Germans, fled along the railway northward.

With the capture of Amman the Turkish 4th army was broken in two. One part of it was hemmed in between the Arabs on the north at Der'a and the British at Amman and

the other was penned in between that town and Maan on the south, which the Arabs had taken two or three days before. South of Maan the Turkish forces along the railway to Medina were hopelessly cut off. Up to the evening of the 27th, 5,700 prisoners and 28 guns had been captured in the Amman district. On the 28th the 5th Light Horse brigade moved south, and advancing about 14 miles reached the station of Kustul, where they were in touch with the part of the 4th army which was retreating northwards from Maan. Next day this force, stated by its commander to number 10,000 men, surrendered at Ziza, another station on the Hejaz railway a few miles below Kustul.

A grim comedy was enacted in this surrender, for the captured so outnumbered their captors that it was extremely difficult to protect the Turks from the swarms of Arab horsemen who thronged the line of march. The British commander therefore allowed two regiments of Turkish troops to retain their arms and ammunition, and no little amazement was caused in Amman when two fully armed Turkish regiments and thousands of other Turks marched in side by side with the British cavalry. A great many Turks, however, had slipped away during the night. These were probably local men, and had returned to their homes. Nearly 5,000 Turks, none the less, marched into Amman, and thus swelled the number of prisoners taken up to that date by Chaytor's force to almost 11,000.

North of Amman the Turks had been shepherded towards Der'a, where the Arabs had gained possession of Izra and Ghazale, stations on the railway north of Der'a, on the 26th, Der'a itself, together with Sheikh Saad, 16 miles to the north, falling into their hands on the following day with 1,500 prisoners. On the 28th the 4th cavalry division linked up with the Arabs and swept on up the railway towards Damascus.

The advance on Damascus progressed throughout September 29, both by the road from the Jordan and along the railway; and by the evening of the next day cavalry had established themselves on the north, south and west of the city, having disposed of the enemy rearguards who tried to bar their way, and taking 1,000 prisoners in the process. During the night of September 30-October 1 the Australian mounted troops were in the suburbs, and at six o'clock in the morning a British force, in conjunction with a part of the Arab army of King Hussein, occupied the far-famed, old-world city. In the

operations that ended in the fall of Damascus over 10,000 Turkish prisoners were taken. These troops had won the race to the city but had been able to go no farther. After the surrender all the Allied troops, with the exception of the necessary guards, were withdrawn from the city, the administration of which was left to the local authorities.

On the day when the occupation of Damascus was announced an official statement was issued to the effect that the Allied governments had decided formally to recognize the belligerent status of the Arab forces fighting as auxiliaries with the Allies in Palestine and Syria. King Hussein Ibn Ali, then grand sherif of Mecca, had, since he raised the standard of revolt against Turkey on June 13, 1916, been of most material assistance to the Allies, through the campaigns of his sons, the emirs Abdulla, Feisal, Ali and Zeid. In 1916 they held Jedda and Taif besides Mecca, though they failed to take Medina. Helped by the British navy —the "Red Sea patrol"—they captured Wejh, and by mid-February, 1917, had cleared the Turks from the whole of the northern end of the Red Sea. In July they captured Akaba, which became the base of the operations conducted by Emir Feisal and Colonel Lawrence. On October 3 Feisal in person was in Damascus which, by one of the wonderful turns of fortune's wheel, had once more become an Arab city.

With the capture of Damascus the campaign for all intents and purposes was ended. Turkey had been dealt the knock-out blow. Three of her armies had been practically annihilated, only a shattered and demoralized remnant having escaped to the north. Only hard marching separated the victorious British troops from the mountains of Taurus. Of opposition there could be none. Aleppo, that vital junction of the Mesopotamian and Palestine fronts, was doomed; and Allenby's advance cavalry, accompanied by the northern Arab army, spread out across the country north of Damascus.

With the conquest of such a large territory in such a short period, the problem of administration and consolidation became for a time the chief difficulty confronting General Allenby. Fierce and bitter political squabbles were even then breaking out between the various Allies, and particularly between the Arabs and the French, and greatly complicated his task. In spite of these problems, however, the occupation of Palestine proceeded apace. The infantry, who had been marching slowly northward

from Jaffa, were now hurried up and began to make good the cavalry's conquest. The whole of the coast was occupied, and throughout the interior, road-making and mending and railway construction were undertaken. The whole country was rapidly brought under control, and cleansed of the Turk.

One of the most difficult problems confronting General Allenby was presented by the Turkish prisoners. Their vast numbers, over 50,000 in Damascus alone, would have in themselves imposed a great strain upon the commissariat, but feeding them was least of the difficulties. Nearly all of them were half-starved, some died of the effects of hunger even after their capture, so low was their vitality. All were utterly exhausted, clad in rags, unwashed, verminous, and often without boots. The condition of the wounded was shocking, some of them having remained with their wounds unattended for a period of over two weeks.

Most serious of all was the dire prevalence of disease. The dreaded cholera was fortunately soon brought under control, but typhus, enteric, ophthalmia, malaria and malignant influenza were rife, and rapidly began to infect the British troops. Every possible precaution was taken, but the overworked medical staff was itself infected, and the improvised hospitals rapidly became crowded. Four times as many of the British cavalry died from diseases as had been killed between the opening of the offensive and the capture of Damascus. But the energy and self-sacrifice of the medical service corps met with its reward, and gradually the worst ravages were checked. By the beginning of November the death rate in the prison camp had fallen from 70 to 15 a day, and thereafter improvement was steady.

In spite of this and all the other problems that beset him, Allenby did not neglect to follow up his advantage. From Damascus he pressed on towards Aleppo. On October 2 his cavalry charged and captured an enemy column near Kubbet el Asafir, 17 miles north-east of the city, securing 1,500 prisoners, two guns and 40 machine guns. North and north-west the mounted troops scoured the country and brought in 15,000 prisoners. Zahleh, on the north-east, was taken on the 6th. The Turks evacuated Beirut on the coast, which was occupied on October 8, and the British marched into Sidon (Saida) without any opposition. Baalbek, the ancient Heliopolis, at the foot of the ante-Lebanon range, was entered by British armoured-car

batteries on October 9. The Syrian Tripoli was occupied on October 13 without resistance as two days later was Homs, on the railway, about halfway between Damascus and Aleppo. Allenby's advance became a triumphal procession, and on the morning of October 26 his cavalry and armoured cars were in Aleppo after slight opposition.

Aleppo—called Beroea and Khalep in former times—is an old city like Damascus, and like it has seen many changes. As a place of considerable strategic importance its defence by the enemy had been regarded as a certainty, but Liman von Sanders had withdrawn from it a day or two before the arrival of the British, and had gone to Alexandretta. The conquest of Syria was virtually complete. It had been a whirlwind affair, and had rendered the position of the Turks in Mesopotamia impossible. By advancing down the Euphrates, Allenby was in a position to capture their whole force. Indeed, the problem had now become where next should the British strike? There appeared to be no armies left to conquer.

When the 15th cavalry brigade, the forerunners of the British army, reached Aleppo, they were informed that the last body of Turkish troops to leave the town had retreated along the Alexandretta road. Without waiting in Aleppo, therefore, they pushed straight on after the fugitives, who numbered about 1,000 men with two guns. The advance guard of Jodhpore and Mysore Lancers, trotting up a slight rise, suddenly came under machine gun fire. The Turks had taken up a position just south of Haritan, and were prepared to make a desperate defence. Their left flank, rather exposed, rested on a slight knoll, and Major Lambert in command ordered the Mysore Lancers to charge. In face of heavy machine gun and rifle fire the Indians dashed forward and rode into the Turkish position, killing 50 and taking 20 men prisoners. But the Turks were too numerous for the small British squadrons, and on the approach of Turkish reinforcements the Indians retired. For the first time since the attack on their line north of Jaffa, the Turks had inflicted a slight check on the British, who for the time being were held up; and the Turks completed their withdrawal in safety.

The interest of this engagement is twofold. In the first place it proved to be the last engagement of the campaign; and, in the second place, in the resolute Turkish commander who had with his rearguard covered the retreat of the Turkish forces from

Aleppo, Turkey was to find her future dictator and, possibly, saviour. Mustapha Kemal Pasha had the distinction of inflicting in the last engagement of the Palestine campaign, the only real check, small as it was, that the British had received since Allenby launched his victorious offensive just over a month before.

By October 31 British cavalry had occupied Muslimiya, just north of Aleppo, the junction for the Bagdad railway, without opposition. On that day the armistice with Turkey came into operation. Hostilities ceased at 12 noon, and the campaign, a model operation, was over.

In just over a month Turkey had suffered a defeat that is almost without parallel in modern history. Her loss in killed and wounded will never be known exactly, but over 75,000 prisoners in British hands attested the extent of her collapse. Of her armies, which once numbered nearly 3,000,000, barely 500,000 remained. Over 1,500,000 had been lost through desertion, and it is estimated that 325,000 had been killed and 240,000 had died of disease. Her people were war-weary and desperate, and the imminence of German defeat in France and the Bulgarian armistice had been the final disillusion. The Talaat-Enver ministry was overthrown early in October, and overtures for peace were at once begun. The armistice was signed at 9.40 p.m. on October 30 on board the battleship Agamemnon and came into operation at noon the following day.

Allenby's work was done. At a cost of 5,666 in casualties he had conquered the northern half of Palestine and the whole of Syria, destroyed three Turkish armies and captured 360 guns and 800 machine guns. The railway stock, lorries and other transport that fell into the hands of the British was immense, and the stores captured were almost beyond enumeration. The imminence of Turkey's collapse and the demoralization on her home front had undoubtedly simplified his task, but nothing can detract from the brilliance of his achievement.

Courtesy of Prof. Garstang

SCENE OF MANY ARMAGEDDONS. The pass of Megiddo guarding the approaches from the south of Palestine to the plain of Esdraelon. Megiddo has been the scene of so many battles that as Armageddon it has become proverbial. Allenby's great victory over the Turks, September 19–21, 1918, is known as the battle of Megiddo.

Georg Haeckel

AN ANCIENT CITY OF SYRIA. View of the old citadel of Aleppo. The city lies 70 miles east of the Mediterranean on the Adana-Damascus railway. It was the headquarters of the German general von Falkenhayn, when he was commander-in-chief of the Turkish armies opposing the British advance in Palestine. Following the conquest of Palestine the British under Allenby invaded Syria and occupied Aleppo on October 26, 1918.

AUSTRALIAN LIGHT HORSE ENTERING THE SQUARE OF DAMASCUS, OCTOBER 1, 1918

ADVANCE IN MACEDONIA. French infantry attacking a fortified farm in Macedonia in the final offensive against the Bulgarians in the autumn of 1918. After the surrender of the latter on September 30 the Allies proceeded to expel the Germans and Austrians from the Balkans and by November 9 part of the Salonica army had crossed the Danube and was marching to Bukarest.

CHAPTER 23

Parting Shots in the West

THE successes of the Belgian, French, and American forces were mainly due to the exhaustion of the Germans under the continuous attacks of the British armies. For 12 weeks Sir Douglas Haig had struck a rapid succession of blows which had a cumulative effect upon both the material strength and the spirit of the German forces. After every defeat there was an increase in Hindenburg's difficulty in replacing lost guns, machine guns, and ammunition; and at the beginning of November, 1918, his reserves of men were exhausted.

General Pershing's and General Gouraud's advance towards Sedan had blocked the only path of retreat south of the Ardennes forest. The German high command immediately prepared to evacuate its central forces by way of Namur. General von Gröner, who had the reputation of being the greatest German expert in railway management and supply, came to Spa to conduct the withdrawal. General von Lossberg's army of Lorraine, with which he had hoped to recover the initiative by a stroke through eastern France, was reduced to 11 divisions, owing to the need of reinforcing the troops along the Meuse.

Against this enfeebled army General de Castelnau was accumulating some 20 French divisions and from four to six American divisions; and there were other French forces in reserve. In these circumstances the German high command prepared a rapid retreat northward from the line of the Scheldt and Mormal forest. On November 3 Tournai was about to be abandoned, together with the Guise gap and the Oise and Sambre canal. Hindenburg still hoped to prolong the war through the winter, if only he could withdraw his main armies back to Antwerp and Namur. Haig, however, had staged another attack upon a vital centre in anticipation of the enemy's movements. He intended to forestall the German withdrawal, and by a final battle bring the entire struggle to an immediate conclusion.

While the battle of Valenciennes was going on between some eight German divisions and the 22nd, the 17th, and the Canadian

army corps of the British 1st and 3rd armies, other British forces prepared for the last great general action of a decisive nature. The 9th corps, under Sir W. P. Braithwaite, was ordered to force the Sambre and Oise canal; the 13th corps, under Sir T. L. N. Morland, deployed most of its strength in an attack on Landrecies and the southern part of Mormal forest. This was the main work of the 4th army, employing the 25th, 50th, 18th, 32nd, and 1st divisions. On their left the 3rd army used the 5th corps, under Lieutenant General C. D. Shute, the 4th corps, under Sir G. M. Harper, the 6th corps, under Sir J. A. L. Haldane, and the 17th corps, under Sir Charles Fergusson. The 1st army again employed the 22nd corps and the Canadian corps which were concluding the struggle round Valenciennes. The 38th, 17th, 37th, New Zealand, 62nd, Guards, and 34th divisions, and the 11th, 56th, 3rd and 4th Canadian divisions were also engaged.

The German divisions of defence were more numerous than those of the attack, but they were weakened and dispirited by their reverses. At the same time that Sir Douglas Haig was preparing for his final battle, the French 1st army, under General Debeney, again moved its point of attack, and its principal divisions of assault came alongside the British 4th army north of Guise, making a battle front of nearly 40 miles between the Scheldt and the Oise. On the right of the French 1st army other French and Italian divisions maintained their pressure against the last of the Hunding defences, thus prolonging the line of battle another 60 miles to the Aisne at Château Porcien. Farther up the Aisne, by Attigny, General Gouraud and General Liggett continued fiercely to drive into the armies of General von Einem and General von der Marwitz. So that on a line of more than 130 miles the German forces had to stand to battle at the time when an undisturbed withdrawal was their only means of escape from general disaster.

Sir Douglas Haig considered the capture of Valenciennes to be a necessary preliminary to a further general offensive. This was effected during the two days, November 1 and 2. The 61st, 49th, and 4th divisions had crossed the Rhonelle river and captured Maresches and Presau when, on November 2, the Canadian 4th division entered Valenciennes and advanced beyond the town. On the night of November 3 the Germans withdrew on the Le Quesnoy-Valenciennes front, and were preparing to

withdraw both in the Tournai salient and in the area south of the British positions. Everything was in readiness.

The battlefield extended from the Sambre, north of Oisy to Valenciennes, and the front occupied by the British 4th, 3rd, and 1st armies was roughly of a length of 30 miles. Very difficult country had to be crossed. The river Sambre formed the first obstacle. The forest of Mormal, though it had been greatly thinned by German wood-cutters, still offered considerable shelter to defending troops, and in the north stood the town of Le Quesnoy which was fortified and might offer strong resistance. Over the 30 miles of country ran several streams which would naturally impede progress, and much of the ground was in a swampy condition.

Sir Henry Rawlinson opened the battle with a heavy bombardment in the moonless night before dawn of November 4, and sent the men of his 1st division out under a barrage at 5.45, an hour before sunrise. They attacked along the Sambre canal by Catillon village and the canal lock, some two miles to the south. After capturing Catillon and the lock they were able to pass troops over the Sambre at these points. This passage was effected in two hours, by which time the 1st Cameron Highlanders and the 1st Northamptons were east of the river. Everywhere the barrage was most effective, and a general advance was early reported along the whole front. The villages of Bois l'Abbaye, Hautrève, and La Groise were rapidly captured. But though the attack was everywhere successful, it was not carried through without the most gallant and determined resistance on the part of the Germans at certain points.

At Ors the 32nd division had very hard fighting before they made a passage over the river and advanced to Mézières and Heurterbise and through these villages to the outskirts of La Folie. Other battalions of the division later in the day crossed the river south of Landrecies and captured La Folie. Strong opposition was also met with by the 13th corps which had attacked at 6.15 a.m. with the 25th, 50th, and 18th divisions. At Preux-au-Bois the German garrison held out until the British infantry entirely surrounded the village and tanks were also in action against them. At Landrecies, too, they made the most determined effort to hold the bridge-head. The 25th division, which had done such excellent work on October 23 in turning Bishop's Wood, attacked from the ground which it had won

and fought its way into Landrecies. A battle was fought round the town for some hours, during which time machine gun posts were destroyed and several counter-attacks broken which had been launched by the Prussian Guard. The passage of the Sambre was forced both north and south of Landrecies, the river being crossed by rafts.

In the centre of the attack the Germans at first fought in the most determined manner, but when their early resistance was overcome, divisions of the 3rd army advanced rapidly. The 38th and 17th divisions penetrated deeply into the forest of Mormal, reaching the eastern edge by the morning of November 5. The 17th division met with strenuous opposition at Locquignol, but overcame it and then advanced a mile beyond the village. As has been said, the Germans had cut a great deal of the timber in the forest, making large new clearings, in addition to the old open spaces and wide glades in the centre. Where the trees were thinned they endeavoured to create new obstacles by means of wire entanglements, log barricades, pits and other traps, and in addition to packing the line with machine-gunners, they employed a force of cycling machine-gunners and marksmen to strengthen endangered points.

The British barrage had a weight and precision unlike that used in Delville Wood and other early woodland battles. Heavy guns were employed in masses, and directed by aeroplane control. Mainly, however, it was the light British tank that transformed the conditions of forest fighting, and made the forces of attack greatly superior to the defending corps. In thick fog the tank pilots had to steer by compass, yet they broke through the thick-set hedges and searched out machine gun nests in front of the British infantry. When the sun came up, the day of the last great British battle was wonderfully fine. The crews of the tanks entered with zest into the business of hunting out machine gun nests, crashing at them through brushwood, log works, and wire entanglements, and generally avoiding easy and open ways of approach likely to be sown with anti-tank mines.

As in other forest combats, there were Germans hidden in tree-tops. Light field guns were pushed forward with rounds of case-shot, to deal with this menace. As a rule the men on concealed platforms up the big trees were able to escape notice from the tanks, and the fire from their machine guns and magazine rifles was disconcerting to British infantry parties exploring the

ground beneath. Well-spread bursts of case-shot, however, cleared the trees, while the travelling barrage swept the ground.

The German defence was patchy, some regiments fighting in a more determined manner than others. This was largely a matter of the freshness or staleness of General von Below's divisions. Some that he had used since the opening of Sir Julian Byng's offensive were wasted down to less than a skeleton. The whole of the German 111th division was reported by prisoners to have been reduced to 250 men—the establishment of an ordinary company. On the other hand, the forces brought from the eastern front were strong in both numbers and spirit.

The German high command was probably correct in assuming that it could generally restore the morale of its men by a winter rest and large drafts of the youngest recruits. The Germans had been great soldiers, and where they were under able officers and not completely worn out, they still struggled with the old determination. They were, however, overwhelmed by the machinery of the British attack. With a devastating barrage in front of them and the light tanks as scouts and supports, the leading brigade of the 38th division reached by midday on November 5 the glades of Les Grandes Pâtures. As was remarked in connexion with the Cambrai action, clear, level spaces had become harder to cross than hills or forests, by reason of the great number of machine guns employed by the Germans. The struggle in front of Locquignol went on during the night, when the Germans completely broke and retired; and before dawn the 38th division reached beyond the eastern edge of the forest towards the railway running to Aulnoye junction, thereby achieving the deepest advance in the battle, while the leading troops of the 17th division were one mile beyond Locquignol.

Above the Roman road to Bavai the 37th division and the New Zealand division had the severest struggle in the action. They had to advance by Chissignies and the hills above the Ecaillon stream towards the old fortress town of Le Quesnoy. By this picturesque old walled city Englishmen first came under the fire of cannon in the year of Crécy, and in 1711 the duke of Marlborough ended his last campaign by its walls. As in the case of Guise castle, the old ramparts and bastions acquired renewed importance in the age of the machine gun and trench mortar, and by allowing observation over the ground of approach made excellent telephone positions for gunnery observation officers.

General Harper, commanding the 4th corps and using only two of his divisions, arranged to take Le Quesnoy by envelopment; but General Russell employed the New Zealanders in a frontal stroke as well as a turning movement.

In the opening phase of the action the German forces were very energetic in defence. Strengthened by troops withdrawing from the Tournai salient and the flooded land south of it, they met the attack with a counter-charge. The 37th and New Zealand divisions opened with a bombardment by guns and trench mortars; but, formidable as the barrage was, it did not shatter the German works. The two divisions were held up along the railway embankment by Chissignies, between the Bavai road and Le Quesnoy, the chapel at the edge of Chissignies village being one of the concealed strong points held by German machine-gunners. As soon as the German commander learned that his front line troops had checked the advance on the outskirts of the northern part of Mormal forest, he launched a counter-attack in mass, hoping to retrieve in his centre the critical reverse on his southern wing.

This attack was shattered, with heavy losses. The British travelling barrage was resumed, and five tanks charged along the embankment. Although only two got across, they were very helpful in the fighting round the fortress chapel. When their new line gave way, the Germans broke above the Roman road. The 37th division stormed into Louvignies, on the highway to Le Quesnoy, and then swept through all the upper forest defences to the village of Jolimetz, and there worked through the last ambushes towards the railway running to Aulnoye junction.

In the meantime, some of the New Zealanders were engaged in a great struggle. With scaling-ladders, they carried the outer ramparts of Le Quesnoy as soon as Chissignies fell, and with their artillery breached the curtain wall. Under fire from the garrison of some 2,000 men the outer fortifications were stormed; but, as at Guise castle, the machine guns checked the assailants in the main works. Thereupon General Russell picketed the town, and poured his troops round it north and south, meeting again with fierce resistance at the village of Herbignies, where the Germans held out until the evening. There were many batteries assisting in the defence of Le Quesnoy, from the cover of houses, trees, and hedges in Mormal forest. They stayed too long in action. Before any of them could be withdrawn the

New Zealanders charged with the bayonet among the gun crews. They then continued their long thrust behind Le Quesnoy, breaking through the German artillery line, and reaching the wagon line and cutting off the transport as the drivers were on the point of galloping off. One hundred guns were captured by the New Zealanders and the 37th division, leaving the garrison of Le Quesnoy perplexed over the disappearance of their protective barrage. Yet the Germans in the old fortressed town still held out behind its breached outer wall. British aeroplanes flying low dropped messages reading: "You are completely surrounded, and our troops are far to the east of you. If you will surrender, you will be treated as honourable prisoners of war."

The Germans read the message, but their commandant would not surrender. Then two treating parties were sent in, each consisting of a New Zealand officer and two German officer prisoners. Entering by the breach in the outer ramparts, they shouted the summons to surrender, and the promise of honourable treatment. A few men accepted the offer and came out, but the German commandant and many of his officers resolved to stand in Le Quesnoy to the last moment, hoping thereby to win more time for the withdrawal of the main German forces. The fortress town controlled the railway between Valenciennes and Aulnoye, so that the longer the line could be held and the more destruction done to it, the greater would be the difficulties under which the British railway construction troops would labour in lengthening the British lines of communication.

In the afternoon Sir A. H. Russell determined to carry the fortress by storm. Under another fierce bombardment the New Zealanders scaled the high sheer inner walls, and while their guns opened more breaches in the ramparts, the leading troops of the attack rushed German machine gun nests with the bayonet, and fought from barricade to barricade through the streets. About 4.0 p.m. 1,000 Germans, surviving from the original garrison force, found that all exits from the town were stopped, and surrendered in batches.

The New Zealanders well deserved the distinction they won towards the close of the campaign. They were a force small in numbers when compared with the army corps maintained by the larger and more populous dominions of Canada and Australia, but in quality they were excelled by no other troops on the continent of Europe. In their ranks served more than half of all

the men of military age in their country. After closing the line above Albert in the German spring offensive they had fought from August 21 to November 4 from the Serre plateau to the eastern edge of Mormal forest.

Above the New Zealand division, by Orsinval and the sources of the Rhonelle stream, the 62nd division opened the attack, while the British Guards waited on their left to develop their action as soon as Orsinval was taken. Again there was a hard struggle against the front line of defending forces, and after the men of the 62nd division penetrated the German front and the Guards swung alongside them on the left, there was much desperate fighting among the marshes and artificial floods. Although the Guards and the 62nd division had difficult work before them, they were never checked in their large sweep through Fresnoy and Preux-au-Sart to the outskirts of Commegnies. Indeed, like the New Zealanders, they went so quickly that they ran into a battery of large howitzers, capturing them as the drivers were beginning to limber up. Field guns were taken in considerable number, and ground won by Wargnies. On the left of the Guards the 24th division, under General Daly, stormed forward quickly towards the two villages of Wargnies, meeting with little determined resistance, save from machine gunners in Wargnies-le-Petit. The 19th division also advanced with comparative ease on Bry and Eth.

On the front of the 1st army the 11th and the 56th divisions, with the Canadian 3rd and 4th divisions, were, at this time, engaged on a front which reached to the eastern side of the marshes north of Valenciennes. The Germans had fallen back after their defeat on November 2 to the line of the Aunelle river, five miles from the town. British troops forced this stream, won the high ground beyond, and met successfully a counter-attack in the hamlet of Sebourg. There was little force behind this attempt to hold the front. Battalions were so reduced in strength that one had a total of only 50 rifles, and another, the 73rd Fusiliers, mustered scarcely a platoon of survivors.

With the utmost determination the weakened German forces pressed the British line back slightly on the high ground above the Aunelle river, but this temporary loss was quickly recovered. The attacking British troops again went forward towards the Mons road into the flank of the great salient which the Germans were holding round Tournai. Again the German commander

collected strong forces from his withdrawing northern armies, in order to save the position on his left flank rear. When the 11th and 56th divisions pressed forward on November 5 from the hills by the Aunelle to the Honnelle river, they met another counter-attack, but they repulsed it, and the British and Canadian troops worked still more deeply into the German flank, until at night all the ground before them flamed and thundered with the ammunition dumps which the Germans were busily exploding because they could not remove them. The chief menace to their material of war came from the British Air Force. One British battalion collected 30 German guns, abandoned under aerial assaults. In all, more than 450 guns were captured in and around Mormal forest.

The French were immediately beside the British armies. On the right of the British 4th army was General Debeney, whose men had fought beside General Rawlinson's army from the Arze to the Sambre and the Oise. Once more General Debeney had changed his concentration of assault, moving his main strength above Guise, and turning the upland town by a thrust on an eight-mile front between Oisy and Grand Verly. He assisted General Rawlinson by attracting some eight divisions of General von Hutier's weakened forces, and General Rawlinson helped him by first breaking the German lines and thereby endangering all the front. Nevertheless, the Germans fought hard and long against the French, using the large screen of Nouvion and Regneval forests for collecting counter-attacking masses which held Debeney's troops by the canal-side until midday.

The Germans gained little by delaying the movement of the French 1st army, while they were breaking before the British 4th army. They were completely exhausted when General Debeney's divisions deployed across the wide waterway. At Venerolles and other adjacent villages there was a continuation of the German trench system, erected in August after the break along the Somme. While the British troops, by bridging the canal for tanks, managed quickly to shatter all the system, the French infantry had a more arduous task, and did not capture so large a number of guns. Yet they took some 5,000 prisoners. The German divisions between Oisy and Guise were completely defeated. Guise then fell without a struggle, and Nouvion forest and other tracts of woodland were overrun by the British troops with practically no resistance.

This immediately led Marshal Foch to prolong the front of battle another 40 miles to Château Porcien, making, as General Debeney's centre and southern wing came into action, a line of moving fire stretching for 100 miles from the Scheldt near Condé to the Aisne. General Mangin and the French 10th army vanished; General Guillaumat and the French 5th army were departing; their common direction was the Lorraine front. In their stead appeared the French 3rd army, under General Humbert, which had filled the gap by Noyon in March, when Sir Hubert Gough's divisions were overwhelmed. The Italian 2nd army corps also came into action, and, with the strong mass of fresh French troops, swiftly broke any further attempts at resistance by General von Eberhardt and General von Mudra.

Instant retreat had been imposed upon the German centre armies by the British advance along the Maubeuge railway. Lines of supply and reinforcement were being cut in the rear of the German 17th, 18th, and 7th armies, and to a considerable extent the traffic of the German 1st army was disorganized. Above these broken or breaking forces the German 6th army was in increasing difficulties in the deep Tournai salient and crowding back along the bombed, cross-country railways running to Nivelles and the region south of Brussels. One branch railway, running from Hirson to Chimay over the Belgian frontier and into the Ardennes, remained for the time unimperilled, except by aeroplane raids, but this could not carry the material of a single army.

Thus, although the centre German forces had instantly to retreat, they also had to fight rearguard actions in the centre in order to win a few days for getting guns and other vitally important material away. This was the reason why Marshal Foch brought fresh French and Italian troops into action between the Serre and the upper Aisne. Attacking on November 4, from the Sissonne sector, the Italian divisions advanced through the Hindenburg defences round Montcornet, and made a notable advance to Le Thuel. Thence, in a fierce action along the Hurtaut, the Italians broke over the highway between Rozoy and Rethel, and closed on Rozoy, carrying it on November 6. This advance, continued northward toward the ancient battlefield of Rocroy, was of high importance. It cut across the centre railways connecting at Mézières and Charleville with the Namur and Metz lines of retreat, and hurried into confusion the German

movements over the Meuse into the forest of the Ardennes. On either side of the Italian troops the French, under General Debeney and General Humbert, were heavily pressing the enemy. The weather after a fine spell became cold and rainy, inflicting hardship on the infantry and making transport difficult.

Mutiny now began to make its appearance in the German ranks. The outbreak of rebellion among the sailors and marines of the High Sea Fleet at Kiel had its repercussions in the army ; and disturbances occurred at Brussels and other places. German officers made the most heroic attempts to keep their men in hand, and, on the whole, were remarkably successful in forming new rearguard forces from amongst their tired and dispirited troops. Local stands, however, had little effect upon the course of the last actions. Along the line of the British advance the only serious resistance encountered was that which checked the 22nd corps of the 1st army between Valenciennes and Mons.

At this point the German garrison occupying the end of the Tournai salient was some 20 miles in the rear of the forces of attack advancing towards Bavai and the Mons canal. General von Quast had to hold the ground by the Honnelle river until his troops retired from the Tournai region, where the floods they had created in the Scheldt valley, by saving them from direct attack, had induced them to stay too long. For the fourth time the great mass of rested troops was directed across the Mons canal upon the northern flank of the great British wedge driving at Maubeuge. The ensuing battle of the Honnelle river resembled the action along the Aunelle stream. The British forces first broke through the ordinary rearguards and climbed the heights leading through brook valleys towards Dour and Malplaquet. A strong, new German force arrived and gave battle, and the advanced British forces withdrew over the stream. Reinforced in turn, they renewed the attack, once more forced the passage, and charged up the hills ; then the German commander used all his available strength. Drawing on troops as far distant as the Dutch frontier and with a great mass of guns, he attempted a counter-offensive to save Maubeuge.

In spite of the streaming ground, the British guns were hauled forward with an abundance of shell, and on November 6, while the Canadians fought their way into Baisieux and Quivrechain, the British troops carried Ancre, and forced the Honnelle river for the third time ; and the Guards, after breaking German

counter-attacks, closed upon the cross-roads of Bavai. In the night the northern German armies accepted defeat. The thick, wet weather had not saved their moving columns of men and vehicles from the British airmen in daylight or darkness. These descended in the rain over the packed roads, and completed the demoralization of the German forces by incessant machine gun and bomb attacks. The German hold upon the Mons line weakened. In the early morning of November 7 the Guards division stormed into Bavai, and with the 62nd division closed upon Maubeuge. During the night of November 7 the Germans abandoned the old fortress of Condé. The 1st corps, under Sir Arthur Holland, and the 8th corps, under Sir Aylmer Hunter-Weston, crossed the Scheldt on a wide front below Antoing.

Farther north the Germans began a movement of withdrawal by Renaix, and abandoned the western part of Tournai in immediate preparation for an enforced rapid retreat from the city. This was completed on the following day. The fortified town of Maubeuge was carried by the Grenadier Guards before dawn on November 9, after some fierce fighting by the outer fortifications of the great entrenched camp in which a large French force had been captured in September, 1914. Maubeuge was a memorable place from many points of view. The failure of its forts against the German siege artillery made the first battle of the Marne indecisive by allowing the Germans to stand along the Aisne with their heavy artillery, race to the Flemish coast, and threaten the Channel ports.

Old memories of Maubeuge, however, were not altogether tragic. Into this doomed entrenched camp General von Kluck had designed to drive Sir John French's forces after encircling them. By refusing the shelter of the frontier fortress the British commander saved his troops, and also saved France. There was something very appropriate in the fact that the war practically ended with the Grenadier Guards, representing Sir Douglas Haig's original forces which had fought round the fortress in August, 1914, storming into the strategic railway centre on which all the German fugitive centre armies had depended for food and munitions. While the British 3rd army conquered Maubeuge, the 4th army, having taken Avesnes, marched towards the Belgian frontier above Trelon forest towards Sivry. Cavalry, cyclists, and tunnellers scouted in front of infantry and guns. On the right of General Rawlinson's troops the French 1st army,

after making a swift advance to Nouvion on November 6, and sweeping through Vervins on the same day, sent out their cavalry and armoured motor-cars to maintain contact with the vanishing Germans, reaching the railway junction of Hirson on November 8. On the same day the more southerly railway junction of Liart, connecting the old Aisne lines with the Namur and Metz communications, was taken by the French 3rd army.

When Tournai was recovered on November 8 the British cavalry had to gallop to find the Germans, and only after a ride of 10 miles to the outskirts of the town of Ath, on the turned line of the Dendre, was contact resumed with the northern German forces on November 10. The weather had cleared two days before, which did not improve matters from the German point of view. All their movements were more easily and minutely traced day and night, and pursuing attacks from the air greatly damaged the forces in retreat.

The Belgians and French, having won bridge-heads along the Scheldt between Ghent and Audenarde, began an advance towards Brussels, where the German troops were mutinous. In this movement the British 2nd army took a leading part, advancing through Renaix on November 9, and reaching the edge of Grammont the following day. Below Grammont the old moat of the Dendre, famous in Marlborough's campaign, was carried. The East Lancashires of the 55th division, who had held Givenchy in the last struggle for the Channel ports, carried the barricades of Ath, under cover of Lewis gun fire from the upper part of a house, won the bridge intact, and shot the men trying to blow it up; then, as King Edward's Horse began to encircle the town, the Germans retreated in haste.

Only round Mons was there any resistance of importance by the Germans as the Canadians of the 1st army worked round it from the north, west, and south. There was no military need to accelerate the attack on them, as Mons was being deeply outflanked southward, where the divisions of Sir Henry Rawlinson and Sir Julian Byng had still to move swiftly to keep in touch with the retreating Germans.

The Canadians closed upon the town in the evening of November 10, and in early darkness of the day of the armistice the Montreal Highland battalion of the 7th Canadian brigade recovered Mons. East of Ath, in the morning of November 11, 1918, the East Lancashires and King Edward's Horse were ready

for battle along the road to Brussels, with their 60-pounders, 6 in. howitzers, and field artillery ranged for the barrage. When the armistice order reached headquarters only an hour and 26 minutes of war remained. So the battle was not fought.

In the Verdun sector there was an American offensive strongly pressed from the direction of Douaumont fort. Orders were given the previous night for the action to continue until armistice was proclaimed. In the darkness there was a heavy bombardment by the artillery on both sides, at daybreak the shell fire increased, and at 9.30 the American troops advanced and covered a mile and a half of ground. The Belgians entered Ghent four hours before the armistice, the Germans having evacuated the city in the morning. The French recovered Mézières entirely the evening before the fighting ended.

At 11 a.m. on Monday, November 11, 1918, the Allied line ran from the south of Holland along the Terneuzen canal, a few miles east of Ghent, towards Nederbrakel, on the Ninove road. It passed beyond Nederbrakel, held by Sir Herbert Plumer's troops, to Grammont, and along the Dendre to Lessines and east of Hourain, where the British had forced the river. The 5th army, under Sir William Birdwood, had its line through Ollignies, Ghisenglise, and Gages.

The British 1st army was beyond Jurbise and stretching east of Mons to the Binche road by Haulchin. The 4th army stood on a line by Cousoire, Grandrieu, the Bois de Martinsart, Sivry, and Grande Helpe river to Moustier, the junction with the French 1st army. Cavalry patrols, however, were much farther east, and much ground was unoccupied by the Germans.

The French were well across the Belgian frontier: beyond Chimay and across the Meuse at Vrigne and in the western suburb of Sedan. The Italians were above Rocroi. A little southward the Americans held the Meuse line, reaching, with French units, into the outskirts of Stenay, crossing the river above the heights of Meuse, stretching across the Woevre to Marcheville and St. Hilaire and Dommartin Wood to the Moselle west of Metz forts. Thence the front ran without change to Thann, in Alsace. Sir Douglas Haig's dispatch thus describes the military situation on the British front on the morning of November 11:

In the fighting since November 1 our troops had broken the enemy's resistance beyond possibility of recovery, and had

FIVE MAIN STAGES ON THE WESTERN FRONT AND THE ARMISTICE LINE

Map showing the fluctuating line on the western front from 1914 to 1918—really the whole campaign was a prolonged battle—and the chief Allied and German gains. The line on the extreme right indicates the limit of the Allied advance known as the Armistice Line, November 11, 1918.

forced on him a disorderly retreat along the whole front of the British armies. Thereafter, the enemy was capable neither of accepting nor refusing battle. The utter confusion of his troops, the state of his railways congested with abandoned trains, the capture of huge quantities of rolling-stock and material all showed that our attack had been decisive. It had been followed on the north by the evacuation of the Tournai salient, and, to the south, where the French forces had pushed forward in conjunction with us, by a rapid and costly withdrawal to the line of the Meuse.

The strategic plan of the Allies had been realized with a completeness rarely seen in war. When the armistice was signed by the enemy his defensive powers had already been definitely destroyed. A continuance of hostilities could only have meant disaster to the German armies and the armed invasion of Germany.

Some criticism, latent or outspoken, has always existed of the decision to cease fire when the Germans had accepted the exceptionally severe terms of the armistice. A section of opinion (mostly misinformed) has held that the Germans should have been harassed to their own borders and made to feel in their home country some of the horrors of that warfare which they had carried into France and Belgium. But on purely military grounds there could not have been the smallest justification for such a course.

"Supply difficulties," said Sir Douglas Haig in his dispatch, "would have very greatly delayed our advance. Widespread damage would have been caused to the country through which we passed, and further casualties must have been incurred. On the other hand, the armistice, in effect, amounted to complete surrender by the enemy, and all that could have been gained by fighting came into our hands more speedily and at less cost."

Marshal Foch entirely concurred, and is reported to have said that what advantage might have been gained from prolonging the fighting would not have been worth the loss of a single soldier.

CHAPTER 24

Air Raids and Combats

With the passing of each successive year of the world conflict the value of air-power assumed greater and greater importance, and served as an incentive to invention and research in innumerable ways. We have in previous chapters shown how supremacy in the air alternated between the British and German flying services during 1915-1917. The year 1918 saw the high-water mark of Britain's effort in this direction. After a new air ministry had been created in 1917 and the R.F.C. and R.N.A.S. had been amalgamated under its control, plans were drawn up to expand the newly united force to no fewer than 240 squadrons ; and when a total output of 4,000 machines a month was reached there arrived a period when there were more machines than there were men to fly them.

The new director general of aircraft production was a Scottish man of business and engineering knowledge, Sir William Weir (he became Baron Weir in the same year) who gave free scope to some of the best machine and engine designers and makers, and obtained some of the best aero-motors in the world. When, however, he became air minister and other apparently able men were appointed to direct manufacture, there was a serious slackening in the output of machines of new and more powerful type and engines with new and valuable features. On the other hand, there was a great extension in the number of training units. These were formed into groups—southern, eastern, western and northern, and the units formerly known as reserve squadrons were called " training squadrons." By November, 1918, these squadrons totalled 19, and there were in addition 56 training depot stations, each with three training squadrons. In the first month of the year Sir Hugh Trenchard, who had commanded the R.F.C. in France, took up his duties as chief of the air staff, and his place overseas was taken by Major General J. M. Salmond.

When, in March, the Germans launched their offensive on the western front, the R.A.F. did much to frustrate the plans of their high command. Sir Douglas Haig in a dispatch stated that

throughout the operations the R.A.F. established a superiority over the German pilots which was without parallel since the days of the first battle of the Somme. The scout squadrons, equipped mainly with Sopwith Camel and S.E.5 machines, were in continuous combat with the German single-seaters at high altitudes, while other units harassed the infantry with bombs and machine gun fire. Meanwhile, the two-seater squadrons carried on reconnaissance, artillery observation, photography and bombing with excellent results.

The French airmen did not progress so well. When the German offensive across the Ailette, Aisne and Vesle took them by surprise on May 27 most of the crack German pilots were concentrated about Laon. Among them were Captain Berthold and Captain Meckhoff, each with some 30 victories, and Lieutenants Udet, Lowenhardt, Kirsten, Kroll, Peutten, and the brother of Manfred von Richthofen. They held the air beyond the Marne river for at least 24 hours, destroying or forcing down the aerial forces of the French 6th army and overcoming many of the machines working with the British divisions of the 9th corps. Hundreds of low-flying German machines swept the ground with fire and released bombs upon material and troops.

All that the Germans had been taught by the British in the aerial blockade of roads of advance by Albert and Amiens they put into intensive practice in the night of May 27 and the following morning. The bridge by Château-Thierry, for example, was made almost impassable, and aerodromes over a considerable depth of country were destroyed. Marshal Foch, however, had strong forces within call, and he began counter operations by concentrating every available bombing machine in attacks upon the bridges and crossings of the Ailette and the Aisne, where 23 tons of explosives were dropped. Bombing operations were continued on May 28 and the following night, some 37 tons of projectiles being released upon railway stations, roads and marching columns of troops between Laon and Fismes. Only a few of the German high-flying fighter machines were destroyed on May 27, 28, 29 and 30, but on May 31 the French airmen shot down some 37 machines, which was at least double the number of German victories for the day.

Across the main German railway communications between Laon and Maubeuge the British air force attacked at Busigny and Le Cateau, besides making excursions to Valenciennes.

German fighting machines were brought down in great numbers, often in the proportion of five to one lost British machine, and seldom in less proportion than four to one. Lieutenant Bongartz, one of the German champions of the air, was brought down wounded by a British airman.

In the previous month—on April 21—the Germans had lost their most famous fighting pilot, Captain Baron Manfred von Richthofen, when Captain A. R. Brown, of No. 209 squadron, in a Sopwith Camel shot him down. Richthofen had headed a squadron of picked scout pilots since the beginning of 1917, and had accounted for the destruction of more than 80 Allied machines.

As the months passed, the Germans were outnumbered in aircraft and aero-motor workmen as well as in aerial fighting men. Great Britain led the way in the struggle for superiority of material, and with Sopwith, Bristol, Martinsyde, British Nieuport, Fairey and other splendid fighting machines, Porte flying-boats, Handley-Page and de Havilland machines, most of them produced in large quantities, dominated the air wherever British pilots worked over land. Among the engines used were the improved Hispano-Suiza, which owed a good deal to Italian refinement, the Rolls-Royce of various types, the Siddeley-Deasy, the Bentley B.R. and other British designs, with French air-cooled motors, such as Le Rhône and Clerget, which the Germans also adopted for fighting aeroplanes working in high altitudes. Very high compression, produced by alterations in design, was employed to give greater power. The difficulty of getting enough air in the thin atmosphere at great heights was usually overcome by providing additional intakes in the carburettor and fixing an altitude control for opening these when the engine was losing power through lack of air. These and other improvements were adopted by friend and foe, the Germans being quick in picking up ideas from machines that fell.

In spite of the successes of Lieutenant Fonck and others of her champions, France, the pioneer in fine engine design, and for long the peer of Great Britain in light and handy fighting machines, remained inferior to Germany in general strength. She was assisted to some extent by the American flying corps, which obtained at last some examples of the much advertised Liberty motor. The production of the united genius of Ford, Packard and other American builders of standardized motor

vehicles was eventually made into something practical, under the organizing power of an American copper magnate, Mr. John Ryan, who was appointed to a position somewhat similar to that occupied in Great Britain by Lord Weir; but it was not so good as the best British, French, and Italian engines. It possessed, however, the virtue of cheapness and large output, and was serviceable in machines that did not need great speed and climbing power. The American flying corps continued to use foreign engines and foreign machines for fighting purposes, and to a considerable extent remained a charge on the Allied factories instead of a relief.

Italy was saved from weakness by two forces of British machines that helped her decisively to dominate the Austro-Hungarians. One British group operated in Italy from the Asiago upland to the Piave river, while the other worked across the southern Adriatic against Durazzo and Cattaro, the pilots using land aeroplanes and continually making the journey of 240 miles without any means of floating on the sea. Italian engineers and fitters were thoroughly competent, and Italian designers notably inventive, but they lacked the abundance of coal and metal needed for huge quantity production of machines. While, however, they had to rely to some extent on their Allies for material they furnished in return inspiring ideas and admirable designs, so that Mr. Handley-Page and Signor Caproni vied with each other and with Mr. Holt Thomas in the construction of great cargo-carrying machines. Engines of Italian design were used in American fighter aeroplanes, and an interesting semi-rigid airship was sent from Italy to England.

One of the outstanding British achievements in aircraft engineering was the introduction and development of the flying-boat, for which Wing Commander J. C. Porte was largely responsible. The Porte flying-boat was produced in an experimental manner in 1914, and increased in weight, wing span and engine power until 1917. Although there was an average of only 10 boats in service each month at Felixstowe, they made the waters between western Holland and the English coast an extremely hazardous area for the Germans; and their use was extended to the Mediterranean.

Improvements in aircraft design which in normal times would have been the result of years of study and experiment sprang into existence under the stimulus of war. As time went on, methods

of attack and defence, evolved through the bitter school of experience, were taught to new pilots and observers, and by the summer of 1918 formation flying had been brought to a high standard. Patrols formerly carried out by flights in formation were done by entire squadrons, and an independent air force was established in order to carry out retaliatory raids on Germany. A squadron of Handley-Page machines and a squadron of de Havilland machines constituted the striking power of the independent force.

Operations were begun in June by a campaign against German aerodromes. But the British pilots had not the range of action and the staying power needed for their work. The long-range scouts required to protect the Handley-Page and de Havilland bombers were not forthcoming. There arrived on the western front, instead, more machines whose engines had to be replaced by other motors, and this work was not completed before the cessation of hostilities. A special group of machines, capable of carrying a cargo of bombs as far as Berlin, arrived late, and the machines were only ready to attack three days before the armistice was signed, and did not come into action.

Between June 6 and November 10 the independent force dropped 550 tons of bombs in Alsace-Lorraine and the regions of the Rhine, 160 tons being released by day and 390 tons by night. Of the total of projectiles used, 220¾ tons were launched upon German aerodromes as a measure of advanced counter-attack upon fast enemy scout machines that could not be met on equal terms in the air. Sir Hugh Trenchard's strategy in this respect was undoubtedly sound and even brilliant; but men, machines and bombs would have been saved for more important work if long-distance fighter machines had been provided to accompany the bombing squadrons. A large proportion of the projectiles was employed against railway stations and blast furnaces in the neighbourhood of Metz, because the pilots were unable to reach German territory. Sometimes their engines were not powerful enough to fight against the strong winds encountered, and squadron leaders had to use nice judgement to determine whether their petrol would last out.

The losses in British machines were high, and the task of Sir Hugh Trenchard and his officers grew at times as desperate as had been the work the R.F.C. carried out on the British fighting front in the days of the Fokker scourge. Equipped with machines

never intended for combat with the swift single-seaters of the Germans the men of the independent air force had to fight their way to their objectives, and ward off massed attacks on their return as best they could. These flights occupied sometimes five hours, generally in the intense cold of 12,000 feet or more.

Among the most striking of the British operations was an attack by Handley-Page machines on the chemical works at Mannheim in the night of June 29. Owing to tempestuous weather only one machine reached the great factory. The bombs were dropped on the target, but on the return journey the machine was blown out of its course, landing undamaged 160 miles south-west of the aerodrome. On July 5, 12 de Havillands set out to attack the railway sidings at Coblenz. Owing to the weather, the squadron steered at the start by compass, and when the Rhine was reached the city was found to be covered in cloud. The leader turned to find a clearer target, but the anti-aircraft gunners of Coblenz heard the machines and set up a fierce barrage. The pilots then turned into the zone of gun fire and there found a small hole in the cloud through which part of the railway could be seen. All the bombs were released.

At the end of the same month another squadron of de Havillands went out to attack Mainz. South of Saarbrücken 40 German fighting aeroplanes surrounded the little British formation. The Germans concentrated on the rear machines and on the leading machine, and four of the de Havillands were shot down. The rest reached Saarbrücken and bombed the railway station, but on their way home they were again attacked in overwhelming force, and three more were brought down.

Immediately the few survivors reached their own aerodrome another squadron of de Havillands made a further raid upon the factories and sidings at Saarbrücken, and did great damage with no loss to themselves. Afterwards the same squadron set out in bad weather for Karlsruhe, reaching the station, which was partly blown up after the railway sidings had been badly damaged. Again German scout machines started in pursuit, but three of them were driven down out of control at the cost of one de Havilland.

Frankfort, then the important financial centre of Germany, was attacked for the first time by 12 de Havillands. Most of the bombs burst by the goods station, east of the town, and except for the loss of one observer, who was killed by machine gun fire,

all the machines returned safely, in spite of a mass attack by 40 German scouts, who met the British squadron at Mannheim. Two of the German machines were destroyed and three were driven down, while the de Havillands ran out of petrol and only just cleared the trenches on their return after a flight of five and a half hours.

The Handley-Pages had more endurance. Two of them took seven hours in the night of August 21 to carry about a ton of bombs to the railway station of Cologne. The projectiles crashed down upon this critical centre of the enemy's communication system, and the pilots and crew made a safe return. The next day 12 de Havillands with B.H.P. engines made another raid on Mannheim. The power of travelling at a high altitude with a cargo of bombs was vital to the heavy British aeroplanes in the absence of an escort of long-distance fighting scouts. This high altitude the B.H.P. engines could not then give.

Two of the British machines, attacked by eight Germans, were compelled to land about five miles over the lines. Then, near Mannheim, another 15 hostile scouts, with great speed, climbing power and agility, swooped down on the British formation and a fight followed at 6,000 feet. The leading German was shot down out of control, and three other machines were destroyed, while under resolute and incessant attack by superior numbers the 10 de Havillands carried out their operations at Mannheim, where much damage was done.

Three days afterwards the same works were attacked by two Handley-Page machines. One pilot followed the Rhine, shut off his engines at 5,000 feet and glided silently down over the factories. He was picked up by German searchlights and a storm of shell was poured at him. The second pilot then glided down, and the two British machines, coming very low over the poison gas works, sent their bombs clean into the buildings against an almost point-blank fire from the German batteries. The Britons replied with their machine guns, swooping low and raking gun positions, searchlights, roofs and streets with bullets, and made their return journey through a thunderstorm.

The Mannheim factories were attacked once more on September 7, and another and memorable attack was made on the night of the 16th when seven Handley-Page machines set out to bomb Cologne, Mannheim and Bonn, and reached most of their targets. In the return journey, however, they were met by

a south-westerly gale. One machine landed in Holland with engine trouble, and most of the others seemed to have run out of petrol. On the 25th four de Havilland machines with Liberty engines were brought down during a raid on Frankfort, in which eight tons and a half of bombs were dropped. Then the independent air force assisted the American 1st army in the attack on the St. Mihiel salient, and continued to cooperate with General Pershing's forces by wrecking the German railway communications during the Franco-American thrust along the Argonne towards Sedan. During this phase of the struggle Sir Hugh Trenchard's improvised squadrons became better equipped for long-distance work and for their main task of wrecking the sources of supply of the German army, the British bombs being made more destructive. Young pilots, still in their teens, were posted to France in ever-increasing numbers, and under the guidance of veteran leaders formed new units and took the places of the fallen.

In July two of the most distinguished R.A.F. pilots, Major J. T. B. McCudden and Major E. Mannock, were killed. McCudden was killed in an accident when on his way to take over command of No. 60 squadron. He was then British champion on the western front, with 57 victories. On leaving an aerodrome on the last stage of his journey his engine failed shortly after taking off, and while trying to turn he side-slipped. Major Mannock, who commanded No. 85 squadron, and was officially credited with having destroyed 50 enemy aeroplanes, was shot down in flames by fire from the ground on July 20. In the last months of the war many members of the flying service received recognition for acts of gallantry and courage.

As has already been noted, the R.A.F. assisted the French aviation service in the long struggle by the Oise and the Aisne in June and July. During the last period of the German offensive the enemy tried to conceal his movements, especially on the Marne river, by means of vast barrages of smoke. The Allied airmen, however, swept in strength over the German lines, tracing the movements of the hostile masses, discovering the positions of attacking batteries, and blocking the transport of supplies by concentrated bombing attacks on the railway and roads of the Marne salient. On the Champagne front the outmanœuvred German armies were practically shepherded through the scene of slaughter by the aeroplanes of defence. It

was partly by the help given by his airmen that General Mangin was able to take the Germans by surprise on their flank. The French commander had large forests in full foliage to screen the gathering of his forces, but the traffic in his rear areas would probably have made the Germans suspicious had they possessed the power of making long reconnaissances such as many British airmen possessed.

When Marshal Foch began to press the Germans all round the Marne salient the power he exercised in the air by means of squadrons of French, American and British machines rendered the German withdrawal a necessity, in spite of the advantage they had in occupying heavily wooded country. The German commander could not supply his troops or move them freely. The new army he introduced merely added to his difficulties when his railway communications from the Belgian frontier to the bridge across the Aisne were interrupted for hours by day and night. In the overcrowded salient the roads were grey with marching men in two streams, one of the exhausted forces tramping to their rest-places, the other of relieving divisions going into action. The Allied airmen not only directly attacked these targets, but continually ranged upon them the big French guns that carried to the Vesle river.

Meanwhile, Sir Douglas Haig and his staff made skilful use of the weak part of their aerial system of patrol. Owing to the westerly curve of the northern part of the Belgian-British front, German reconnaissance machines were usually able to explore freely the back areas of the forces holding the Ypres and La Bassée sectors. They came over the Yser towards St. Omer, keeping very high and darting back to Flanders if an Allied machine started to climb up to them. Generally it was not worth trying to prevent these observation visits. Instead, the German observers were provided with some sights they would think worth photographing. Parks of tanks, some of painted wood, were set up, along with other signs of an impending grand attack. General von Armin and General von Quast responded by preparing a strong defence, retaining large masses of men that were soon urgently and vainly required along the Somme. Altogether the British trick of using a sector of aerial weakness to cover activities in a sector held in strength was a classic example of the art of adapting new methods of warfare to its old and tried principles.

As a rule, it was possible to foretell the direction of a coming hostile offensive by the activity of enemy photographing machines as, for example, in the case of the German attack on the 5th army. When, however, it was the turn of the British to attempt a surprise offensive, their increased strength in the air enabled them to dispense with any genuine photographic indication of their intentions. All the German front, from the Passchendaele ridge to the Luce brook, was mapped minutely by the camera. A pretence of extreme interest in the northern sector was made, and fighting and bombing formations were largely used there also, but the British victories were prepared in advance by the general, methodical labours of the photographic airmen who extended their work over some 4,000 square miles of territory, recording this enormous stretch of ground not once but many times. Directly on their work were based the intricate movements of attack that opened on August 8.

While, however, photographic work in the air increased considerably in importance and quickened in reproductive technique, the visual labour of artillery machines somewhat declined in general range. With the development of the art of camouflage, use of dummy guns and of small smoke-screens, the detection of hostile batteries grew into a problem too difficult of solution for airmen alone. Nevertheless, Britain was definitely gaining the upper hand in the air. During the last battle of the Somme the improvements made in wireless telephony enabled airmen on contact patrols to listen to ground signallers and change their work to meet an emergency. To these low-flying aircraft were allotted the duties, amongst others, of spreading smoke-screens to hide advancing tanks, and of attacking at close quarters the German anti-tank guns.

On the Somme the British bombing machines made the river crossing impracticable to the retreating German troops. Von der Marwitz's broken men, turning south at last, confused the wing of von Hutier's army as a consequence of the pressure exerted by the British bombing squadrons. Thereupon German fighters collected in hundreds above the Somme to clear a passage for the fresh columns of men and guns streaming down to prevent an utter break-through. As they assailed the British bombers they were in turn attacked by the British single-seater fighters. At first the total British air losses were slightly heavier than the German, but most of the British casualties were due to perils

run by low-flying contact aeroplanes. On August 10 the Germans began to lose in a proportion of more than two to one, which proportion was rapidly increased.

The German air forces on the western front were estimated at 2,700 machines, including some 250 bombing aeroplanes, 250 contact machines, 1,100 fighting machines and 1,100 observation and spotting aeroplanes. In about three weeks in August the British had 262 machines missing, while of the German air force in the same sectors of action 465 machines were destroyed and 200 sent down out of control with 61 kite-balloons set on fire. Practically the whole of the air fighting was conducted over the German lines, where about 912 tons of bombs were dropped by British airmen in less than a month.

At the end of the first week in September, rainstorms and high winds interfered with flying, but pilots and observers continued their artillery work and reconnoitring and patrol duties. For a time night flying became impossible, much to the advantage of the German forces, and when, in the middle of September, the weather improved, it was found that they had employed the interval in gathering stronger formations of attack. After a short period of clear air the weather again became adverse to flying, and remained so until the last days of the month. This was one of the reasons why the German armies were able to make so strong a stand north and south of Cambrai. The British, however, worked forward through rain, mud and mist, with their contact and spotting aeroplanes droning in front of them.

Early in October, despite the cloudy, unsettled weather, a trainload of ammunition in Aulnoy railway junction, through which the German armies were being supplied, was blown up, and while releasing other bombs on the junction the R.A.F. wrecked the centre of German communication, compelling a retirement. In the action of October 4, after bringing down 32 German machines, the British fighting squadrons were able to take part in attacking troops and transport on the ground; and swarms of British contact machines acted as makers of smoke curtains for the British infantry, while the advanced machine guns of the attack were supplied with ammunition by aeroplane.

During the same month, when the weather was thick, the command of the German air forces attempted to save the army by using their Fokker machines as rearguards, these machines

sweeping under the low clouds and through the drizzle to the ground recently evacuated and machine-gunning both infantry and artillery occupying it. The battle had swung forward in the centre and on the northern wing close to the German aerodromes, so that while the German pilots had but a short distance to go in making their dashes upon the advancing forces, the Allied aircraft had left their aerodromes far behind. On October 30 aerial fighting was intense. Against the loss of 64 German machines shot down and the demolition of an aerodrome, only 19 British machines were lost. In this final destruction of Germany's air-power in the autumn of the year British, French, and American pilots took part.

The condition to which the German aviation service was reduced on the British front immediately before the close of hostilities was patent when an interval of fine weather occurred on November 9. A large number of British machines went out, harrying the German columns, disorganizing their retreat, and shattering the railway junctions on the line to Aix-la-Chapelle. But only a comparatively small number of German machines was seen, and on the day following the British vigorously continued their work of turning a retreat into a rout.

On the Italian front in May the activity of the flying contingents was extraordinary. The British brought down 82 Austrian machines with a loss of only two of their own. The Italians also lost two machines, but destroyed 54 Austrian machines. Two Italian pilots on June 13 flew to the Zeppelin works at Friedrichshafen and back, a distance of 500 miles. By the middle of June the Austrians had lost some hundreds of machines, together with their best pilots, in a vain attempt to win free reconnoitring power behind the Piave river and the foothills of the Alps. They sacrificed another 107 in a final endeavour to obtain reconnaissance and artillery observation, but their pilots were shot down by British and Italian airmen at the sacrifice of nine machines. During the fighting between June 15 and June 25 Italian and British observers discovered 390 Austrian artillery positions, directing fire upon them until they were smothered.

While this work of single-seater squadrons was going on in the high fighting altitudes, in the lower observation positions the machines of Caproni, Handley-Page and de Havilland played an important part in deciding the issue of the battle of the Piave.

The Austro-Hungarian bridges, boats, fords and assembly places west of the river were bombed with huge projectiles. Major Baracca, the Italian champion, was killed on June 19, after winning his 40th victory, being brought down in a Nieuport on the Montello by the Austrian champion, Captain Brumowski, who also claimed the same number of victories. At the opening of the final offensive on the Italian front, mist and fog that served the infantry attack in forcing the passage of the Piave

river hindered the work of the Allied airmen. But during the clear days of the pursuit and rout the combined flying organizations were of immense use, carrying supplies to forces over the river, and then acting as the advanced units in the chase that broke up the Austro-Hungarian armies.

As in other campaigns, the operations in Salonica were largely assisted by aircraft, and the collapse of the Bulgars in September was hastened by the action of the R.A.F. In the early months of the year the Bulgarians were formidable as regards air strength, but the arrival of No. 150 squadron equipped with up-to-date scout aeroplanes soon reversed the position.

In Palestine, in September, the R.A.F. achieved some striking successes, the strategy of Sir Edmund Allenby's attack being largely based upon the supremacy in the air won by his pilots. The process of wearing down hostile aircraft had gone on all through the summer. Although during one week in June 100 hostile aeroplanes crossed the British lines, in the last week of August only 18 passed over, and many of these were shot down.

When on September 21 the broken Turkish forces were attempting to escape through the only gap in the Allenby net of cavalry and infantry, the British airmen executed an outflanking movement that closed the crossing of the Jordan against the fugitives. They turned one column of transport so that it fell into the hands of their cavalry, and completely blocked a crowded road at the point where it ran through a gorge; thence they pursued what remained of the transport until it turned in the required direction for surrendering to the mounted troops. More than 1,000 motor-lorries and wagons were destroyed, and the wreckage of some 87 guns was afterwards found on the blocked road. Over a vast stretch of country straggling fragments of three Turkish armies were tracked from the air and worked into the prisoners' camp.

The civilian population in England experienced on many occasions the devastating effects of German air raids. Between the minor attack on Dover on December 24, 1914, and the raid on Kent on June 17, 1918, there were 51 airship raids and 57 aeroplane raids, resulting in 4,820 casualties, apart from the 791 caused by bombardment from the sea. As time went on the organization for the defence of London, which was naturally the principal objective of the German raiding squadrons, became extremely complex and extensive. The first necessity in fighting

the raiders was to see them. The searchlight crews were supplied with lights of constantly increasing power, and orders were flashed to them by means of a master searchlight. Elaborate instruments were introduced for detecting the position of the raiders. Range-finders were also improved. Round London a circle of searchlights was gradually drawn, so that towards the close of the war there were over 200, many of immense power. When held in a searchlight beam German machines would sometimes drop their bombs at random in order to rise and escape.

In the summer of 1917, 90 fire brigades, in an area of 750 square miles, were organized to give aid in London in any emergency. All the reservists in them were recalled from the front, the Royal Engineer detachments attached to the firemen were doubled, and arrangements were made for bringing up additional men in motor-lorries in the event of any grave outbreak. When the first warning reached the fire brigade its supports closed in from the outlying area towards the most dangerous points. The lighting of the streets was steadily reduced until the glow could no longer be seen 40 or 50 miles away. It was also altered from night to night. Thus the Germans were prevented from getting their bearings with ease, though the river remained, and down to the close of the war no one had devised any means of dealing with it.

On the railways the tell-tale glare from the locomotive fires was screened and the lamps were put out at stations. The signal lights were either extinguished or masked. All lights in the trains were masked by drawing the blinds, or else were extinguished, though in the Zeppelin raid of October 19-20, 1917, one train at least was caught with unscreened lights, and became the target of several bombs. There were other experiences of a similar nature, as, for example, the occasion when the driver of a train in the eastern counties, while running in misty weather, heard above him a strange noise, and, looking up, saw that a Zeppelin was immediately overhead, low down. The night was dark, and the mist had only lifted for a moment; to that he probably owed his escape. He was in a lonely stretch of country, and had he been attacked there was no help at hand.

The artillery protecting London and the great towns was steadily strengthened. In the early days of air raids London had no more powerful weapon to protect it than the old "pom-pom" and naval 6-pounder, clumsily mounted. More guns were supplied, and the main defence was moved farther out. There

was one system of defence on the coast and a second on the outskirts of London, while inside London a number of guns in fixed positions and many motor-guns were brought into play when the Germans succeeded in passing the outer defences. Weapons of great power were used, though there was always the danger that if large shells were fired their fragments might do damage in falling. In one case the base of a 60 lb. shell came through the roof of a building in the City, and there were other examples of injury from the British protective fire. In the later periods precautions had to be taken against the possibility of the Germans flying low and using their machine guns on the streets. To meet that a number of machine guns were mounted on buildings and manned by volunteers.

This system of defence from the ground by means of searchlights, anti-aircraft guns and sound-detecting stations was further amplified by the balloon apron, an arrangement introduced by the Italians for the air defence of Venice. It consisted of a series of slender steel wires suspended by cross cables fixed to the mooring cables of kite-balloons at a height of 8,000 feet. The intention was that the raiding aircraft would collide with the hanging net of wires and so be bought down. Ingenious as was this idea, it did not meet with a great deal of success in practice.

The main defence was in the activity of the British air forces. Raiding aeroplanes invariably came from the Flanders coast. They were watched by British aircraft at Dunkirk and Dover, forming the 5th group, R.A.F. So soon as the Germans left their aerodromes, British bombing machines proceeded toward those aerodromes and bombed them heavily. The landing grounds were pitted with craters, with the result that German machines were often badly damaged or wrecked on their return. Other British aircraft, if touch could be obtained with the raiders, attacked them on their outward journey. On the British side of the Channel yet other aircraft were waiting and watching, ready to intercept the German machines.

In the last stages of the war there were some 15 squadrons in England the sole duty of which was home defence, and 200 machines were available by day and by night for operations over and around London. The Germans had been persistent in their attacks on London and centres in Kent, Essex, Suffolk, Norfolk, Lincolnshire and Yorkshire, and their campaign did not relax with the coming of the last year of the war. On the night of

Imperial War Museum

BATTERED RUINS OF ARMENTIÈRES. Armentières, a linen manufacturing town on the river Lys, north of Lens, was the object of violent German assaults in October and November, 1914, but was successfully held by the British. The town was heavily shelled, but remained in possession of the Allies until the enemy push for the Channel ports in the spring of 1918. It was retaken by the British in October, 1918.

Imperial War Museum

REJOICING IN RECAPTURED LILLE. The troops of the Liverpool Irish Regiment which recaptured Lille are seen in this photograph entering the town, where the inhabitants, released from German oppression, lined the streets and opened their doors to the tired soldiers in a frenzy of relief. The town had been held by the Germans since October, 1914, when the British advance of 1918 enveloped and forced the enemy to evacuate it on October 17.

KING AND QUEEN OF THE BELGIANS IN RECOVERED BRUGES, OCTOBER 25, 1918

Imperial War Museum

AWAITING THE SIGNING OF THE ARMISTICE. Foch met the German peace delegates on November 9, 1918, to announce his terms. He is seen here with Haig entering an advanced headquarters train, while he waited to put his armies into motion should the Germans fail in their obligations. On learning the terms of settlement the German delegates had protested vehemently.

January 28, 1918, London experienced the worst raid in the whole series. Firing opened at 8.34 and the last attack came after 12.30. The worst hit was on a large printing works in Long Acre. The bomb penetrated the building, which was filled with many people seeking cover. The projectile was probably fitted with a delay-action fuse, as it burst in the lower part of the structure, setting fire to it. The death roll was heavy.

Other points where hits were made were Covent Garden and the city. The floral hall was struck and the interior much damaged. Large bombs fell into the river, and one of them, probably aimed at Waterloo Bridge, which exploded in the river-bed, was felt to a great distance. St. John's Wood and Kilburn were also attacked, and two bombs in that quarter, narrowly missing the main railway line, caused serious damage to buildings. At Sheerness the raiders bombed a dump, which blew up, destroying much material. The Germans employed about 10 machines, of which only one was shot down. On the following night the raiders again numbered 15, and, prevented from entering the London area, skirted it to the north and worked as far west as Kew and Brentford, but did comparatively little damage. The raids affected the morale of the alien inhabitants of London, and led many thousands of them to take refuge in towns and villages where they thought themselves safe. This exodus congested the already overtaxed railways, and became such a nuisance that in the spring of 1918 special restrictions on the issue of tickets were introduced.

On February 16 a small force of raiders, six strong, reached the outer London defences, and one machine dropped three bombs of great size, one on Chelsea Hospital which completely destroyed a house, and two others at Woolwich. The following night the Germans renewed the assault on London with six machines, and for about an hour there was a violent engagement, the defending guns firing with great energy. Sixteen bombs were dropped. St. Pancras station was hit; the two eastern pinnacles were blown off the tower and other damage was caused; one of the bombs fell in the booking-office, wrecking it, and among the killed and injured were several soldiers on leave from the front. On March 7 the Germans were over London again. They attacked with seven or eight machines on a moonless night. They were sighted near Hatfield, and then, turning south, they dropped several bombs on Hampstead and

one in Maida Vale. The last bomb, of 660 lb., fell in Warrington Crescent, demolished four houses (Nos. 61, 63, 65, 67), and badly damaged the houses opposite. In about 1,000 houses glass was more or less broken, and more damage was probably done to house property by this than by any other single bomb.

The last raid took place on Sunday, May 19, when the Germans encountered the full strength of the defences. They came in considerable force. The fighting lasted three hours, with some intervals, and was of extraordinary violence. The barrage was active, having been greatly strengthened; the aprons were in play; and a powerful force of British airmen engaged the Germans. About 11.30 p.m. a German machine, set on fire by a British airman, fell a blazing wreck. Another was brought down by gun fire. Three were destroyed between London and the coast on their retreat, and two more fell into the sea, one of them in flames. The lowest estimate of the German loss is seven; the highest 11 machines. As against this, 29 bombs were dropped in the London area, and great damage was reported in many quarters.

On March 12-13 German airships appeared at Hull, and on March 13-14 they attacked the Durham coast, inflicting heavy casualties. On April 12-13 four Zeppelins, in cloudy weather, pushed as far inland as Warwickshire in the south and Lancashire in the north. Among the places bombed were the outskirts of Birmingham, Wigan and Yarmouth. This was the last Zeppelin raid in which a German airship dropped bombs on British soil, but on August 5 a squadron of four of the latest and most powerful Zeppelins was sighted on the east coast before it was dark. British aeroplanes at once attacked, when the Germans rose to 19,000 feet and retreated. About 40 miles off the coast one of them, the L70, was attacked by Major Cadbury and Captain R. Leckie in a D.H.4, and fell into the sea in flames.

On June 17 a number of German machines reached Kent, but this proved to be the last. Aerial activity in England, however, continued with extraordinary vigour. When the end came, Britain's air force had no fewer than 22,647 aeroplanes and seaplanes and 103 airships in operation, while 30,122 officers and 263,410 other ranks comprised the personnel.

CHAPTER 25

End of the War at Sea

THE reorganization of the British Admiralty in 1918 was soon tested by a more vigorous prosecution of the war at sea. Early in the year raids from the German naval bases at Zeebrugge and Ostend did considerable damage. On January 14 a German submarine fired 50 shells on Yarmouth, killing four persons and maiming 10. On January 20, at 5.30 a.m., the British destroyer Lizard, on patrol duty off Imbros, about 17 miles from the entrance to the Dardanelles, sighted two ships steaming rapidly towards her. The leading vessel was made out to be the Breslau ; a mile astern of her followed the battle cruiser Goeben, mounting ten 11 in. guns. Near the entrance to the straits, the Goeben struck a mine which, though it did little material damage, completely upset the adjustments of her compasses. There were no large British or Allied ships available at this point to meet the Germans, but the Lizard opened fire on her big antagonists. They replied, however, with such accuracy as to prevent her from closing.

In Kusu Bay, at Imbros, were two British monitors, the Raglan, mounting two 14 in. guns, and M 28, a small vessel mounting one 9.2 in. gun. The Goeben attacked these with her powerful battery, and as at the best they could only oppose two heavy guns to her 10, and moreover it would seem that they were surprised, they could effect little. A second British destroyer, the Tigress, now joined the Lizard and both were subjected to a violent fire. The Raglan, a battered mass of wreckage, had sunk ; the M 28 caught fire amidships and blew up later. In command of the Raglan was Lord Broome, nephew of the first Earl Kitchener and heir to the title, but he was not among the casualties, which were 133 killed and 27 wounded. The Germans, having inflicted this severe loss, turned south, followed by the gallant British destroyers and by British aeroplanes which had gone up. Here the Goeben's damaged compasses led her straight into the minefield. The Breslau, following her, struck a number of mines and settled down fast.

The Goeben turned towards the Breslau and circled round her, but then steamed southwards away from the Dardanelles. At that moment four Turkish destroyers emerged from the Dardanelles, accompanied by a Turkish cruiser. The Tigress and Lizard ran at them, vigorously attacked them, and drove them back after making several hits on the rearmost and setting her on fire. Meanwhile, as no British vessel of her own class appeared to engage the Goeben, British aeroplanes kept up an attack on her and dropped bombs with such effect that she turned and headed for the Dardanelles. As she did so she again struck a mine. The big battle cruiser settled down aft with a list of 10 or 15 degrees, and her speed fell considerably. She reached the entrance, however, and there she was met by the Turkish destroyers and by several German seaplanes.

The British aircraft followed and bombed her once more, making two hits as she entered the strait. A little farther up the current runs very strong off Nagara Point. Here was the opening left by the Turks in the boom closing the strait, close to the Asiatic coast. At this point the Goeben ran ashore on a gravel bottom, and there she was again hit twice by bombs from British aircraft, which continued their dashing attacks upon her despite a heavy fire from her guns and from the Turkish works. The Turks claimed that they shot down one British machine, and this was probably true. Meanwhile, the Lizard and the Tigress had been compelled by the Turkish fire to retire. As they fell back they drove off a German submarine and rescued a number of survivors from the Breslau.

Constant air attacks were made upon the Goeben for several days, and in all 16 direct hits were effected upon her. On the 22nd she was struck amidships, and steam and smoke were seen pouring up from her, but as the bombs employed were not heavy the effect was not so great as could have been wished, though the attacks were made with splendid energy and courage. An attempt was made by Lieutenant Commander G. S. White, in submarine E 14, to torpedo her on the night of January 27, 1918. On the 28th the British aircraft reported that the Goeben had been got off and taken to Constantinople, where it was found her injuries were too serious for repair in the yard. By the time E 14 arrived, the Goeben had been towed off the bank. On her return, the British submarine, damaged by depth charges, was compelled to rise to the surface and was sunk by shore batteries.

The vigilance shown by Vice Admiral Roger Keyes, who had taken over the command at Dover after the Admiralty reorganization, soon stirred the German destroyers to action. He guarded the Strait of Dover so carefully that the German submarines found it increasingly difficult to run through, and the Germans determined to attack with their surface vessels the small British craft watching the strait. Very early in the morning of February 15, 1918, five or six large destroyers made a dash from Zeebrugge for the strait. Probably they had obtained information of the British dispositions from spies or neutrals.

The fighting which followed was brief and unequal. For half an hour through the dark and misty night the noise of rapid firing was borne in to the British coast, as the Germans caught and sank in succession seven little drifters and one trawler, manned by indomitable fishermen and engaged in the anti-submarine work. The crews of these small craft behaved with their accustomed magnificent valour. They had no prospect of success, and help from the warships did not come, through one of those mischances of which the history of war is full. The German destroyers closed in to a range of only 50 yards. "The only thing I can compare this action to," said one of the men engaged, "is an attack by a cruiser on a man in a small open boat, armed with a popgun or revolver." In addition, five drifters, a trawler, and a minesweeper were badly damaged.

In this fierce but one-sided affair 60 men perished. The survivors were publicly thanked and deservedly honoured for their superb conduct. On the night after the attack eight other armed fishing vessels replaced the vessels destroyed, and other fishermen calmly took up the task of the dead. On the following day a German submarine fired some 30 rounds at Dover under cover of darkness, and retired after killing a child and injuring seven persons.

From the early days of the war it had been realized that the railway line running near the coast between Dunkirk and Nieuport was vulnerable to sea attack ; and the Germans decided to strike a blow at it with a number of torpedo boats and destroyers. On March 21, not long before dawn, the two British destroyers Botha (Commander R. L'E. M. Rede) and Morris (Lieutenant Commander P. R. P. Percival) were patrolling the eastern end of the Channel with the French destroyers Capitaine Mehl, Magon and Bouclier, when flashes were seen and firing

heard off Dunkirk. The Allies steamed rapidly to that point and sent up star-shells to light up the water, but they could discover no trace of hostile craft. They altered course and made a fresh search, when a star-shell showed the dim shapes of three or four destroyers moving stealthily through the darkness, followed by two torpedo boats, A 19 and A 7.

After a swift challenge the Allied vessels opened fire. The Germans threw out a smoke-screen, and under cover of it tried to retreat, firing as they retreated. The German destroyers passed ahead of the Botha, but the torpedo boats were unable to keep up with them. By this time, the Botha had been hit in her stokehold, and as her speed dropped Commander Rede turned to close the following torpedo boats. Driving straight at A 19, he caught her amidships and cut her in half; disentangling himself from the wreckage he turned and raked A 7 at point-blank range. Then the smoke-screen shut down upon the fight so heavily that all touch was lost. The French destroyers, hurrying up to finish off A 7, suddenly came upon a destroyer in the darkness without fighting lights, and, assuming it was an enemy destroyer, loosed a torpedo at the unknown. It was, unfortunately, the Botha, and the torpedo, taking her in the after boiler room, stopped her dead. The French destroyers then turned to complete the destruction of A 7, and the Botha limped home in tow of the Morris.

The trials of the Germans were not over when they extricated themselves from the Allied destroyers. Hearing gun fire in the distance, Lieutenant Willett, in coastal motor-boat No. 20, ran up the West Deep at full speed just as dawn was breaking and sighted five destroyers ahead of him. Pressing on to within 600 yards of them he fired a torpedo, hitting the fourth destroyer of the line, and then ran for his life under a hurricane fire from the remainder. On their return to Ostend they were attacked by British aircraft from Dunkirk, which bombed them and threw them into disorder. A number of German seaplanes came out to support them and were severely handled by the British. A single British pilot brought down three German machines, and one other was accounted for by the rest of the British airmen. Prisoners captured stated that 18 German vessels had taken part in the fighting. A very sharp lesson had been administered by the energy and skill of the Allied destroyer leaders and the British airmen.

Among the many outrages of the German submarines, the attack made on the hospital-ship Glenart Castle in the Bristol Channel, at 4 p.m. on February 26, was specially noteworthy for its savagery. The vessel had all her lights burning and the proper marks. She had no patients on board, but of her crew and staff, including several women nurses, 150 perished. From the wounds on the bodies and injuries to the boats which were afterwards discovered, it was clear that the Germans must have fired on the boats to complete their crime. The master of the ship, Captain Burt, faithful to the traditions of the merchant service, went down with her.

In March, 1918, the British government decided to divulge the tonnage figures showing the losses inflicted by the submarines. This decision was indicated by the failure of the shipbuilding yards to turn out the new tonnage promised month by month. It had been hoped to complete 150,000 tons of new vessels every month. Unhappily, the figures steadily fell for many weeks, from 130,375 tons in November, 1917, and 115,752 in December, to only 58,588 tons in January. The output rose again to just over 100,000 tons in February, and to 161,000 tons in March, but dropped again in April to 111,000 tons. It thus continued dangerously below the enemy's sinkings and the monthly average which the government had hoped eventually to reach. In March, Lord Pirrie was appointed controller of shipbuilding and was given special powers.

The total Allied and neutral merchant tonnage lost through military action in the war to the end of 1917 was, for the United Kingdom, 7,079,000 tons, and for foreign countries, 4,748,000 tons. The new tonnage built by Great Britain was 3,031,000 tons, and the enemy tonnage captured and taken over, 780,000. Foreign countries had built 3,574,000 tons, and captured or taken over, 1,809,000. Thus while foreign countries had made a net gain of 635,000 tons, Great Britain had suffered a net loss of 3,268,000 tons, to which a net loss of 367,000 in the first quarter of 1918 had to be added. Almost the entire burden of this frightful struggle had therefore fallen upon Great Britain, and to the stupendous sacrifices which she had made in her noblest blood were added enormous losses of material.

The highest level of submarine destruction was reached in April, 1917, when 893,000 tons of shipping (of which 555,110 were British) were sunk; but after that the losses slowly declined

to a figure of 305,000 tons in April, 1918. The serious fact was that the British new construction entirely failed to keep pace with the British losses. On British shipping depended the very life of the Alliance. The various armies and nations fighting in the Allied cause received their munitions and food through the merchant fleet of Great Britain. The American army and all its requirements had to be conveyed to the front almost exclusively in British merchant vessels, while the merchant service had also to provide the greater part of the patrol service and naval auxiliary cruisers.

Although there was still an adverse British balance of production in June, 1918, there were more ships ready for service at the end of the month than at the beginning. About 140,000 tons of new tonnage was built, and the repair of 700,000 tons of shipping was carried out. When the world's shipping statistics were reviewed, it was found that during the second quarter of 1918 the gains exceeded the losses, for the first time since 1914, by over 280,000 tons.

The work of navigation, moreover, fell on officers and men who faced all the perils and privations of combatants with little of their glory, and who were too often overlooked by Parliament. To the eternal glory of the race, in these hours of trial the morale of the British seaman did not suffer. "With a pluck and bravery beyond all praise," said the chairman of the Peninsular and Orient Steam Navigation Company on December 12, 1917, "they go to sea to-day as they did before the war . . . Even those who have undergone the shock of having their ships torpedoed soon get tired of their rest, and apply to go afloat again." It was as though the whole British merchant service had been touched with the fire of the men who died for freedom at Thermopylae.

The grim resistance of Great Britain, the iron tenacity of her merchant seamen, the steadfastness of her fishing population, the patience and endurance of her navy, surprised the rulers of Germany and led to many German explanations in the closing months of that terrible fourth year of the war which had witnessed the failure of so many hopes. The German experts dealt in statistics which they had carefully garbled, but beneath their figures was the truth that, until British new construction surpassed British losses, her position must deteriorate. On April 17, 1918, Admiral Capelle, the German secretary of state

for the navy, declared that "the danger point for England has already been reached and the situation of the western Powers grows worse from day to day." A few days later, however, Captain Kühlwetter, of the German Admiralty, made the important admission that "the protection given to (American) transports is so efficient that the danger to the submarine is too great to be worth the risk" (of attack), a notable tribute to the British navy.

Between May and the end of the war three features stand out as of paramount interest—the conflict with the submarines, the severance of German land communications with the Far East and the unceasing watch of the Grand Fleet on the High Sea Fleet. In an effort to destroy the submarine menace, Britain greatly increased her mine-laying activities. In the main she relied: (1) on the laying of mines anchored near the surface and dangerous to both surface ships and submarines, neutral and non-belligerent countries being notified of the danger; and (2) on mines laid at such a depth that surface ships were immune from danger. The Germans, on the other hand, laid mines indiscriminately, and in the face of protests from neutral countries tried to place the blame on Britain. Thus, during the summer, German vessels laid a surface minefield in the Cattegat, in which several Swedish merchantmen and one Swedish warship were destroyed; then, when complaint was made, the German authorities denied that the mines were German.

Another method of British defence against German submarines was in the form of surface barrages. One barrage, carried across the Strait of Dover, proved highly successful in preventing German surface craft or submarines from reaching their favourite cruising ground in the Channel. This barrage was composed of a double series of obstructions. One series consisted of specially built vessels which could ride out the heaviest gale at anchor. It stretched from Folkestone to Cape Gris-Nez. West of this, at an interval of seven miles, was another line of similar vessels. The vessels were equipped with searchlights. Between the two series of obstructions were scores of armed fishing vessels, and below the surface were deep mines, nets, and other devices. Between January 1 and August 18 thirty German submarines were destroyed in an attempt to pass this barrage, the effect of which was supplemented by attacks on the German bases and by sinking blockships in the entrances to Zeebrugge and Ostend.

Merchantmen, when they neared the danger zone, were met by destroyers or sometimes by special British convoy submarines. The convoy method, however, was not proof against submarine attack. The Justitia, for example, was sunk though escorted by numerous destroyers, though the U 124, which fired the fatal torpedoes, was sunk by the destroyers. Another drawback to the convoy system was that the destroyers needed for such special duty were not available. The Japanese liner Hiramo Maru was torpedoed off the Irish coast on October 4 with the loss of 310 lives ; and on October 10 the Irish mail-boat Leinster was sunk by a submarine off Kingstown with a loss of 510 lives.

Throughout the year the Allies were hampered by shortage of warships, for, while the major portion of the British fleet had to be held in readiness for an attack by the High Sea Fleet, the transport of the American troops had to be provided for. Nevertheless, by the end of June Ostend and Zeebrugge as naval bases were rendered practically valueless from the German point of view. The larger U-boats were put to the risk of cruising round Scotland in order to reach the Channel and generally avoided Flanders. Britain had mainly to deal with the smaller craft, which did comparatively little damage and of which the Allies took heavy toll. Fast aeroplanes and seaplanes employed on patrol work along the coast were fitted with both depth charges and bombs, and either attacked hostile craft themselves or notified the surface craft engaged in patrol work of the position of enemy vessels.

Between April 1 and October 31, in 39,000 flying hours there were 216 cases in which submarines were sighted, and 189 in which they were attacked. Though the number of submarines destroyed by aircraft was small, there is no doubt that their activities in spotting and bomb-dropping created considerable unease among submarine crews. The heavy German submarine losses in May led the Emperor William to visit the Flanders ports in June and do what he could to encourage the crews. The grim fact remained that one-half of the small U-boats based on this coast had disappeared, sunk by British mines or depth charges, while large numbers of men and guns were required to prevent a British landing behind the German lines. Ludendorff's strength at the decisive point was correspondingly weakened. Attempting to hold everything, he lost everything, and by dispersing his forces prepared the way for the final catastrophe.

British submarines and mine-layers night after night cruised off Heligoland and laid mines in the channels which German craft used when they put to sea. Returning through channels which they supposed to be safe, the German vessels were sunk. Much of the success of this offensive mine-laying was due to the efforts of the British 20th destroyer flotilla with special submarines attached to it, under the leadership of the flotilla leader Abdiel, a vessel of extraordinary speed. The flotilla was constituted in March, and remained at work till the end of the war. Its success induced the Germans to use the strip of territorial water on the Norwegian coast until the Norwegian government protected their neutral water with a minefield.

When the English Channel had been made relatively safe, attention was centred on the Mediterranean, where many British and neutral vessels had been destroyed. With the cooperation of the Italian navy, a barrage was carried across the Strait of Otranto. Peculiar difficulties attended this work, owing to the width and depth of the strait. Moreover, the Austrian fleet had an excellent base at Bocche di Cattaro, only 140 miles from the strait. Attack from this direction was always a grave possibility. The Austrian fleet, however, showed surprisingly little enterprise, probably owing to the losses it had suffered from Italian torpedo craft. Two outstanding examples of the work done by the Italian navy were the destruction of a Dreadnought of the Viribus Unitis type in May, by Captain Pellegrini, and an equally brilliant achievement by Captain Luigi Rizzo a few weeks later.

On June 10 in the early dawn Captain Rizzo was cruising with two small motor-boats, each of which carried two torpedoes and a few depth charges, when he approached an Austrian squadron consisting of two Dreadnoughts escorted by 10 destroyers. Captain Rizzo, signalling to his companion motor-boat to act independently, closed in on the squadron. Before he was sighted he got within 200 yards of the leading battleship, fired two torpedoes and inflicted grave damage. At the same time the other motor-boat fired at the second Austrian Dreadnought astern. The Szent Istvan was sunk by Captain Rizzo, with a loss of 90 lives, but its companion Dreadnought, the Tegethoff, was not hit and returned to port. Both motor-boats escaped by the use of depth charges, which they dropped before the pursuing destroyers. That the Otranto barrage was effective is proved by the fact that after its completion the only important Allied

loss in the Mediterranean was that of the British pre-Dreadnought battleship Britannia, which was sunk off Gibraltar on November 9.

In September, the British Admiralty published a list of 150 German submarine commanders killed, taken prisoner or interned. At the armistice, the total German submarine losses in the war were proved to have been 203 boats out of a total of 388 completed from the date some years before the war when Germany began to build these vessels. Too much emphasis cannot be laid on the grit and tenacity with which the British gradually wore down the submarine menace. The moral effect on Germany of the failure of her U-boat campaign must have had much to do with the ultimate victory. It was in this month that the evacuation of Flanders was begun, and the Admiralty anticipated an exodus from the Flanders bases. On September 30 Admiral Tyrwhitt sailed for Schouen Bank with the Montrose and five destroyers, while a second division, consisting of the Dragon, Canterbury, and five destroyers, made for the Texel. The Germans, however, had been too quick. On September 29 and the following days, 28 destroyers slipped away along the territorial waters of the Dutch coast, blowing up five which could not sail. The submarines had left earlier.

In the early weeks of the summer, western Russia, Finland, Poland, Lithuania, the Ukraine, most of southern Russia, the Caucasus and northern Persia—all were in German hands or under German influence. Germany appeared to have counteracted the British blockade by a land expansion which would give her command of almost every conceivably necessary product. But British sea-power made itself felt by covering the movement of troops to the subsidiary fields. In this way Britain was able to replace the troops that had been diverted to the western front to meet the main German offensive of 1918.

The heavy blows struck by the British army in Salonica and Mesopotamia, which culminated in the surrender of Turkey and the consequent opening of the Dardanelles and Bosphorus, enabled the Allied fleet to strike at the Germans in the Ukraine and in southern Russia and prevented Germany from obtaining the large supplies on which she had pinned her hopes.

While the German High Sea Fleet remained inactive in its ports or cruised only in the Baltic, the British Grand Fleet was strengthened by six American Dreadnoughts, which raised the

total of Dreadnoughts available in the North Sea to 41. The battle cruiser force, which had been sadly depleted in the battle of Jutland, was increased by the completion of the Renown, Repulse, Glorious and Courageous. Nevertheless, the High Sea Fleet, while its mere existence prevented the Grand Fleet operating unhampered in the Baltic, kept the German North Sea bases open for the submarines until the British minefields stopped U-boat movements.

The inactivity of the German fleet led to a great deal of discontent among its personnel, a discontent which was intensified by bad food. At intervals Beatty harassed the Germans in their own territory. On June 19 he swept into the Bight of Heligoland and searched the German coast, but encountered nothing more formidable than seaplanes, one of which was brought down. On July 19 the Grand Fleet conducted another sweep off the Schleswig coast for the best part of two days, and with the assistance of naval aircraft it effected a successful raid against the Zeppelin sheds at Tondern, destroying a number of ammunition dumps and two Zeppelins. On August 11 another attack on the Bight of Heligoland was carried out and once again the German navy declined battle ; but in a last-minute attempt to save the situation a complete change was made in the personnel of the German Admiralty, and preparations were made to send the fleet out to sea in a final effort to achieve a naval victory.

Meanwhile, complete disaster befell the German and Austrian naval forces in the Mediterranean and Black Sea. In late 1917 a mutinous feeling had shown itself in the Austrian fleet, and had led in February, 1918, to a serious outbreak among the Yugo-Slav seamen, who formed the bulk of the crews. Two of the smaller ships, the St. George and Erzherzog Rudolf, hoisted the red flag, and were joined by some other vessels, but not by the bulk of the fleet. The outbreak was speedily suppressed, and many of those concerned in it were executed. After the great defeat of the Austrian armies on the Piave in October, 1918, the Yugo-Slavs declared their independence, and thus the Austrian naval bases were cut off from Austria proper and left isolated in Yugo-Slav territory. On October 31 the crews of the Austrian fleet at Pola mutinied and seized all the remaining vessels of the fleet. The same day the Austrian government announced that " the fleet, naval works, and other naval property shall be handed over to the South Slav National

Council, sitting at Pola." At the same time Fiume was seized by Croat troops for the Yugo-Slavs, and, to complete the confusion, the people of the town declared its union with Italy. As a result, from the opening of November the Austrian army was out of the war and the Austrian naval bases lost to Germany.

As in Austria, so in Turkey, utter catastrophe befell the German plans. The armistice between the Allies and Turkey, on October 30, necessitated her surrendering all her ships and ports and bases. This necessarily included the German battle cruiser Goeben, which had a largely German crew. An interesting problem now arose. Would the Goeben and the other German forces in Turkey and the Black Sea resist the Allied ultimatum? Some days passed before a passage could be cleared through the Dardanelles by the British mine-sweepers, owing to inclement weather. On November 5 British troops landed on Gallipoli, and on November 9 they took possession of the forts. A little later the Allied fleet passed up the Dardanelles, and on November 13 was off Constantinople. The flagship Superb led the array, with the Téméraire, Lord Nelson and Agamemnon following her with the other cruisers, destroyers, and mine-sweepers. There was the possibility of an attack from the German ships in the Black Sea; but when, on November 26, the Allied fleet arrived off Sevastopol no resistance was offered.

To revert to the German plan to make one final attempt to crush the British fleet. At the end of October orders were given to the captains of the German ships to prepare for sea, ostensibly to manœuvre in Heligoland Bight. Jutland, however, had demonstrated to the crews the deficiency of the German naval arm. Not only was the British fleet superior in numbers, it was also far more powerfully armed, for whereas the British ships were equipped with 13.5 in. and 15 in. guns the Germans were still clinging to the old 11 in. and 12 in. weapons. The morale of the German seaman, too, had suffered from the enforced inactivity of the High Sea Fleet and from the long tale of submarine disasters which began to leak out.

In many of the German ships the crews refused to obey orders, and put out the boiler fires. In the Thuringen and Helgoland the crews barricaded themselves in the fore parts of the ships and took possession of certain of the guns. The mutineers surrendered and were taken ashore. The great project had to be abandoned; and, as the alternative to battle, the fleet surrendered.

By the naval terms of the armistice, dictated by Admiral Sir Rosslyn Wemyss, all the effective German submarines were to proceed to an Allied port for internment there. The Germans were also to surrender all their newest Dreadnoughts—16 in number—eight light cruisers, and 50 of their latest destroyers. All their other surface warships and naval aircraft were to be disarmed and interned under Allied supervision in German ports. Sir David Beatty, as commander-in-chief of the Grand Fleet, was responsible for the details of the surrender. He fixed Harwich as the place for the internment of the submarines, and directed that the surface ships should proceed to Rosyth and there be met by the Grand Fleet and inspected, after which they would be sent north to Scapa Flow.

On November 16 Rear Admiral Meurer arrived at Rosyth on the cruiser Königsberg to meet Sir D. Beatty and arrange the final details of the surrender. The German ships were given a rendezvous about 70 miles from Rosyth at which they were to meet the British fleet on November 21. Elaborate arrangements were made against possible treachery when on the night of November 20 the whole Grand Fleet prepared for sea. The German commander was compelled to disarm his ships, with magazines empty, and with guns trained so that they could not be turned on the British ships without attracting attention. The Grand Fleet was to form two immense lines, six miles apart, and between them the German ships were to proceed three miles from each of the British lines. Between three and four a.m. on the morning of November 21 the Grand Fleet weighed anchor and passed slowly from Rosyth, under the Forth bridge and thence to sea. At 7.40 the German fleet was sighted, and at 9.30 a British airship passed out to examine the German fleet and to report thereon.

The critical moment had arrived if resistance was to be offered. The Germans in the morning haze looked in good order; they kept excellent station and seemed to manœuvre well. But there was no sign of hostility. The German crews laughed and waved their hands to the British destroyers when these passed near, though to this the British crews made no response. They acted on orders given by Sir David Beatty, which ran thus:

1. It is to be impressed on all officers and men that a state of war exists during the armistice.
2. Their relations with officers and men of the German navy

with whom they may now be brought into contact are to be strictly of a formal character.

3. In dealing with the late enemy, while courtesy is obligatory, the methods with which they have waged the war must not be forgotten.

4. No international compliments are to be paid, and all conversation is forbidden except in regard to the immediate business to be transacted.

5. If it is necessary to provide food for German officers and men, they should not be entertained, but it should be served to them in a place specially set apart. If it is necessary to accept food from the Germans, a request is to be made that it is to be similarly served.

Over the German vessels flew for the last time the German flag. At 11.4 a.m. Beatty made the historic signal:

The German flag will be hauled down at sunset to-day and will not be hoisted again without permission.

The naval war was over.

The German fleet anchored about Inchkeith, and in the evening the ships were inspected and found to be in poor condition and shabbily painted. After the ceremony of surrender they were taken, under escort, to Scapa Flow, where they were left under guard for their final disposal to be settled by the Peace Conference. Small parties of German sailors were left on each ship for the purpose of maintenance; the rest returned to Germany in German transports, which were given safe conducts.

While the large German ships were being interned, the German submarines began surrendering at Harwich. The first 20 arrived on November 20, another 20 on November 21, and yet another 20 the day after. Each detachment was met and escorted into port by British light cruisers and destroyers. By January, 1919, 185 had surrendered. When the crews had been sent home the submarines were divided between British ports for exhibition, and a number handed over to the Allies.

The disarmament of the German ships in German waters was carried out by Admiral Browning in December. The warships were stripped of their fighting fittings, landed their guns, ammunition and torpedoes and were laid up under Allied supervision. One by one all the naval bases and all the airship and naval aeroplane stations were examined and rendered ineffective. Finally, on January 16 the Allies required the destruction of all incomplete U-boats and the stoppage of further building.

CHAPTER 26

The Expedition to Archangel

In the spring of 1918 the Allies and the United States determined to occupy Archangel and Murmansk, together with the Murman railway. The reasons for this action were the safeguarding of vast military and other stores which the Allies had accumulated at Archangel, the protecting of the flank of the Murmansk expedition, and the reconstitution, as far as possible, of the eastern front; the hope being that contact might be made with the forces of the Czecho-Slovaks and of Admiral Kolchak, west of the Ural mountains.

In the spring of 1918, Finland had become practically a vassal state of Germany, which was forwarding the candidature of Adolf Friedrich, duke of Mecklenburg-Schwerin, as its king; under German influence Prince Frederick Charles of Hesse was actually elected king in September. Months before that, Germany had arranged with the Bolshevist government that the Murman coast and the Murman railway were to be included in an enlarged Finland. She would thus be provided with a fine submarine base and another way of entry into Petrograd. Besides, it was the aim of the Allies at that time to reconstitute, as far as possible, the eastern front in order to prevent further withdrawals of German troops from that front to the western field. Still another reason was that many Russians implored the Allies to come to their aid. Intervention was possible then only in the Murman-Archangel districts and in Siberia.

In the Murmansk and Archangel districts were stored vast quantities of munitions from English, French, and American factories, as well as timber from Russian forests, and grain and coal. It was reckoned that more than 600,000 tons of munitions and military equipment, with a like tonnage of coal, had been landed in that area from Great Britain, America, and France. The Bolshevist government had repudiated all responsibility or indebtedness for these and other supplies furnished to Russia; and this, in the opinion of the Allies, gave them the right to recover their stores.

In February and March, 1918, the British naval forces effected a landing at Murmansk and at Pechenga, about 100 miles farther west and close to the Finnish frontier. But it was not until June and July of the same year that, by direction of the Supreme War Council at Versailles, Allied forces, composed of British, French, and American troops, with Major General Poole in chief command, occupied Murmansk and the adjacent country, including the northern portion of the Murman railway and Alexandrovsk, the landing point of the cable from Peterhead, Scotland. The Murman regional Soviet at the start not only offered no opposition, but cooperated with the Allies for the defence of the railway and territory. On their side, the Allies agreed to recognize the local Soviet as the supreme authority, undertook not to interfere politically, and promised to provide food. These terms were embodied in an agreement ratified on July 7, 1918.

This agreement was reached by the Murmansk Soviet and representatives of Great Britain, France, and the United States of America. Article I of the agreement stated that its purpose was to be "the securing of co-ordinated action on the part of those who have signed this agreement for the defence of the Murmansk region against the Powers of the German coalition." After Article II had described the territory involved, Article III stated that a Russian army under Russian command was to be recruited, and the following article stated that this army was to be supplied with munitions and equipment by the Allies. In Articles V and VI it was stated that internal administration was to be left entirely in the hands of the Murmansk regional Soviet, except actually at the front. Article VII set out the promise of the representatives of Great Britain, the United States of America, and France " to secure food for the whole population of the region, including all immigrant workmen with their families, with rations equal in food value to the rations which the privates of the Allied armed forces in Murmansk are receiving," and Article VIII stated that the distribution of such food was to be carried out by trustworthy Russian troops. In Articles IX and X it was urged that manufactured goods were to be imported as freely as possible, and Articles XI and XII stated that all expenses were to be set down to the Allies, while financial assistance would be given to the Murmansk Soviet. The Allies declared, in Article XIV, that the sole object of the agreement was to guard the integrity of the Murmansk region.

By the middle of July the Allied forces in the Murmansk area numbered about 10,000 men, composed of British, French, Americans, and Serbs, and the occupation had been extended as far as Sorokskaya. On July 13, Chicherin issued on behalf of the Soviet government a protest to Britain, in which he said:

> In spite of repeated assurances by the British government that the landing of the British troops in Murmansk is not a hostile act against the Russian Soviet republic, the British government has not fulfilled our elementary demand for the removal of troops from Soviet territory. . . . Soviet officials are being arrested, and sometimes even shot. Railroad guards are being disarmed. . . . After occupying Kem and Sorokskaya, the British troops moved farther east and occupied Sumski-Posad, on the road to Onega. . . . Such actions of the British troops can be considered only as an occupation of territory of the Russian Soviet republic. We have stated, and we are stating once more, that Soviet troops will do everything possible in order to protect Russian territory, and will offer the most determined resistance to the foreign armed invasion . . .

On August 1, an Allied squadron, predominantly British, which had moved eastwards to the White Sea, attacked the Bolshevist batteries on Modiuga Island, about 30 miles north of Archangel, and after some fighting, in which aeroplanes dropped heavy bombs on the Red troops, opposition was overcome. Next morning the Allied warships anchored in the harbour of Archangel, the Red soldiers having fled from the city in panic. British troops then landed and occupied the railway station. Following on these operations a river expedition, in cooperation with military forces, cleared the Dvina and Vaga of hostile craft.

The main force of the Red army, numbering about 8,000 men, had retreated five miles to the southward, and there the Allies attacked and defeated it, whereupon the Red forces retired to Obozerskaya, on the Archangel-Vologda railway, 70 miles almost due south. British detachments were landed at Onega, on the bay of that name in the south-west of the White Sea, and at the mouth of the river Dvina. Onega was an important strategic point, inasmuch as it kept open the line of communication between Archangel and Murmansk by the Onega-Sorokskaya road. From Onega the troops were to work up to Kotlas, 270 miles south-east of Archangel, and the terminus of a railway, from Viatka, by means of which it was hoped to be able to get into touch with the Czecho-Slovaks in the Ekaterinburg quarter.

On the day before the landing of the Allies at Archangel, the local social-democrats had overthrown the Soviet and established a government, the head of which was Nicholas Tchaikovsky, a leader of the Russian cooperative movement. On September 5 president Tchaikovsky and most of his ministers were kidnapped and imprisoned in a monastery. Three days later, as the result of diplomatic discussions, the ministers returned to office on the understanding that a more moderate cabinet should be formed. They resigned, and a governor general was appointed. About this time General W. E. Ironside succeeded General Poole in command of the Allied forces in the Archangel district, and General C. S. M. Maynard was in command in the Murmansk area. Although there were many Bolshevists in the Archangel area, thousands of Russians joined the Allies, and were officered and drilled by them, while many Russian officers joined up in the ranks as privates.

By the beginning of October the Allies had pushed up the north Dvina to Seletskaya, 70 miles south of Archangel, and on October 6 they repulsed with heavy loss a strong Bolshevist counter-attack at that place. They advanced to Shenkursk, on the river Vaga, a tributary of the north Dvina, and later occupied Kadish on the north-west, on the Yemtsa, another tributary of the Dvina. On the west they held the country to the river Onega, and on the east to Pinega. Their front in the winter stretched in a curve, which was deepest at Shenkursk, about 180 miles south-east of Archangel. In the Murmansk region the Allies occupied the railway for several hundred miles, thanks in a large measure to the help of the Karelians, who in September had completely defeated a considerable force of Finns and Germans at Ukhtinskaya, which was some 40 miles within the Russian frontier.

In both the Archangel and Murmansk regions the first part of the winter passed quietly, but the Arctic climate bore heavily on the Allied troops, particularly in the Archangel district, which was cut off by the ice from the outside world, except by reindeer sleigh transport. The majority of the men were British, but Americans, French, Italians, and even Serbs took part. There were, in addition, many Russians. In March, 1919, according to a statement made in the French Chamber, the actual figures were: 13,100 British, 4,820 Americans, 2,350 French, 1,340 Italians, 1,280 Serbs, and 11,770 Russians.

Early in January, 1919, the Bolshevists delivered frontal and enveloping attacks near Shenkursk. The assault was so strong that, after five days of hard fighting, Ironside had to abandon Shenkursk on January 23-24. On the other hand, the enemy were repulsed on January 25 at Tarasevo, 30 miles north-east of Plesetskaya, on the Archangel-Vologda railway; towards the end of the month, however, the Bolshevists forced the Allies to abandon the town. In February a Bolshevist assault on Kadish was successfully countered, but at the beginning of March the Bolshevists attacked Yevsievskaya, on the Vaga, and compelled the Allies to withdraw a mile from it down the river.

Thereafter the Bolshevists waited for the spring thaw, and boasted that within two or three weeks the British, French, and American forces would be driven out of the Archangel area. But the Bolshevists did not press their advantage, and it was not until May, after the spring thaw had set in and the rivers were open, that they began their offensive; and by that time General Ironside had thoroughly organized his reduced front, while a British relief force, composed of volunteers who had seen service in the Great War, was about to be dispatched to Archangel. In the meantime General Maynard had gained possession of the Murman railway for a length from Murmansk of upwards of 400 miles, and he established his headquarters at Kem, on the White Sea, which was open for ships in the summer. On April 11, the Allies routed the Bolshevists at Urosolero, and on May 18 they took Povyenets, at the north end of Lake Onega and more than 400 miles south of Murmansk. Bolshevist attacks during May on the Dvina, near Tulgas, and on the Vaga, near Berezuik, were completely repulsed with considerable losses.

The British War Cabinet on March 1 decided to appeal to the Allied representative at Paris to evacuate the north Russian contingents as quickly as possible. The War Office sent a cable to Sir W. E. Ironside at Archangel on April 4, 1919:

Will you please communicate, as you may deem expedient, the following message to the troops:

Although you are cut off from your country by the ice, you are not forgotten. Your safety and well-being, on the contrary, is one of the main anxieties of the War Office, and we are determined to do everything in our power to help you and bring you safely home. You were sent to north Russia to help draw off the Germans from attacking our armies in France, and undoubtedly you helped last year to keep large numbers of German troops away from the battlefield and so enabled a decisive victory to be won.

Whatever may be the plan of action towards Russia decided on by the League of Nations, we intend to relieve you at the earliest possible moment, and either bring the whole force away or replace you by fresh men. These reliefs are being prepared now, and will come through the ice to your aid at the earliest moment when the ships can break through. Meanwhile, your lives and your chance of again seeing your home and friends and your fellow-countrymen, who are looking forward to give you a hearty welcome, depend absolutely upon your discipline and dogged British fighting qualities. All eyes are upon you now, and you represent the British army which has fought and won and which is watching you confidently

and earnestly. You will be back home in time to see this year's harvest in, if you continue to display that undaunted British spirit which has so often got us through in spite of heavy odds and great hardships. Only a few more months of resolute and faithful service against this ferocious enemy and your task will have been discharged. Carry on like Britons, fighting for dear life and dearer honour, and set an example in these difficult circumstances to the troops of every other country. Reinforcement and relief are on the way. We send you this personal message with the most heartfelt wishes for your speedy, safe, and honourable return.

Sir Henry Wilson observed in a memorandum:

The position had to be faced that the British empire, in common with all entente nations, was weary and exhausted, depleted in men and money, and incapable of further military efforts on a great scale. That being so, it behoved us to apply what resources were still available in the most profitable direction. North Russia offered no prospects of decisive results, and with Kolchak's failure any sustained military effort in that theatre was doomed to be barren. Moreover, the local conditions were entirely discouraging. In the words of Captain Althan, R.N., our senior naval officer on the Dvina, to whose ability, energy, and whole-hearted cooperation the success of our operations is greatly due, the instability of the Russian troops, the lack of discipline, organizing ability and military leadership of the Russian officers and higher command after a year of the most loyal and capable British support, soon made it evident that to continue that support would be fruitless. In the south, on the other hand, Denikin's operations, starting as they did with every conceivable disadvantage, by sheer determination, energy, and patriotism had achieved already remarkable success, and offered a much greater prospect of decisive results. Accordingly, it was decided and, I am convinced, wisely decided, to concentrate all our remaining efforts in south Russia, and to close down our commitments in the north.

The evacuation of Archangel began as soon as the port was open at the end of May, the first troops to go being French and American units. The transports which carried them brought British reinforcements under the command of Brigadier General Grogan; and another British relief force, under General Sadleir-Jackson, reached Archangel in the middle of July. The general policy of the Allies was to equip and strengthen the local Russian forces, consisting of about 23,000 men, and then, under cover of an offensive, to withdraw all their own forces.

In June and July fighting took place on the western shore of Lake Onega, the Bolshevists being driven off. In June the

Allies advanced up the Dvina river, and carried out raids in the Vaga region ; but in the third and fourth weeks of July a mutiny took place among the Russian troops at the town of Onega, which resulted in that place and the front being handed over to the Bolshevists. It was clear that General Ironside's forces were in a dangerous position, and the whole expedition might have met with disaster if it had not been for the timely arrival of relief forces. While matters were in this state, the authorities decided to appoint General Lord Rawlinson to the supreme command in north Russia with orders to co-ordinate the withdrawal of the entire expeditionary force.

The problem of evacuation was by no means an easy one, and Mr. Winston Churchill put the state of affairs plainly in the House of Commons on July 29, 1918, when he said:

> I should like to say a word about the difficulties of evacuation. Although to us who sit here at home in England it may seem very easy to say, " Clear out, evacuate, and come away " —although it may seem very easy to arrive at that intellectual decision, yet on the spot, face to face with the people among whom you have been living, with the troops by the side of whom you have been fighting, with the small government which has been created by our insistence, with all the apparatus of a small administration, with all its branches and services, when you get our officers and men involved like that on the spot, it is a matter of very great and painful difficulty to sever the ties and quit the scene. I do not disguise from the House that I had most earnestly hoped and trusted that it would be possible in the course of events for the local north Russian government to have a separate life and existence after our departure, and with the fullest assent of the Cabinet and the government, and acting strictly on the advice of the general staff, we have been ready to hold out a left hand, as it were, along the Dvina river to Admiral Kolchak in the hope that he would be able to arrive in this district, and by joining the local Russian forces, which amount to nearly 30,000 men, stabilize the situation, and enable our affairs there to be wound up in a thoroughly satisfactory manner.

It was decided to evacuate Murmansk last, as, if the Bolshevists pressed too hard on Sir W. E. Ironside's withdrawal, General Maynard would be able to threaten Petrograd. In addition, it was necessary to retain possession of the Murmansk coast to keep up communication with England. As the Murmansk port was free from ice, it was not necessary to evacuate it as early as Archangel, and so September 1 was fixed for evacuation.

On August 10 the Allied forces, among which were two battalions of Royal Fusiliers, gained a brilliant victory on the Dvina, and took 2,000 prisoners. General Sadleir-Jackson was in command on this occasion, and his British and Russian troops reached all their objectives in an advance of 20 miles, capturing Pulhega and Borok, Bolshevist bases on the Dvina. Early in August a British flotilla, aided by land and air forces, captured two steamers and took the port of Talvuiski, as well as prisoners and guns, and towards the end of the month the Bolshevists suffered another reverse near Kyapeselga. On August 29 the Bolshevists were defeated at Yemtsa, on the railway.

In order to support General Miller, the military governor of Archangel, in his attack on Yemtsa, Lord Rawlinson had postponed the date of the final evacuation to September 10, and called out a reserve force from England to cover the withdrawal. Early in September the Allies were threatening Petrozavodsk, the Bolshevist base on Lake Onega, and on September 10 Onega was reoccupied by the Allies. The Allies' attacks kept the attention of the Bolshevists fully engaged, and the evacuation went on almost unhindered. At the junction of the Dvina and Vaga rivers there was a brief fight, caused by the failure of the Russians to cover the British retirement down the river, but beyond that small affair there was practically nothing of incident. The Allies handed over military stores, including tanks, to the north Russian government to enable them to continue their opposition to the Bolshevists, and on September 27 the British naval base of Archangel was closed, and the last British troops, the Highland Light Infantry, left Archangel.

A few days later the Allies began the evacuation of Murmansk. The lines of communication were damaged by Bolshevists, and Lord Rawlinson ordered General Sadleir-Jackson to speed up his programme by embarking troops at Popov and Kandalaksha, and to retain two Serbian companies to secure his lines of communication. On October 4 all British troops were north of Kandalaksha, and, although the evacuation of the Serbs was threatened by bridges being destroyed between Kandalaksha and Murmansk, all Allied troops had departed from Murmansk by the evening of October 12. The total British casualties were 196 officers and 877 other ranks, of which the killed numbered 41 officers and 286 other ranks.

CHAPTER 27

Japan's Contribution

ALTHOUGH after she had captured Tsingtau in November, 1914, Japan no longer fought on land, she gave the Allies assistance in other ways. When Germany began unrestricted submarine warfare the Japanese navy took an important part in combating it. The patrol of the trade routes in the Indian ocean was entirely taken over by Japanese ships, thus releasing the British squadrons employed there, but even more important service was given by a Japanese squadron which was sent to the Mediterranean for convoy duty. It consisted of a cruiser, the Akashi, the flagship of Rear Admiral Sato, and three destroyer divisions. This squadron was engaged in escorting transports and merchant ships plying between Mediterranean ports, and it successfully protected convoys whose voyages totalled nearly 250,000 miles. It was Japan who first turned attention to the islands in the South Pacific which Germany had seized some 30 years previously.

These islands lay, roughly speaking, between Japan and Australia, and in the hands of a strong empire, such as Germany, could be made to possess a high strategic significance. As Germany had also occupied the northern portion of New Guinea, as well as the Bismarck Archipelago, farther south, she had substantial interests in this quarter of the globe. The Japanese turned their attention to the islands, which were grouped and comprised, under the general title of Micronesia, Marianne (or Ladrones) Islands, Marshall Islands, and Caroline Islands.

For the most part they were small coral atols, slightly raised above high water, and none of them was large. Of them the most easterly were the Marshalls, totalling some 23 in all, and Jaluit, the best, though not the most populous of them, had become the headquarters of the Germans, with an imperial commissioner in command. A squadron of the Japanese navy in these waters looking for enemy ships visited Jaluit on October 6, 1914, and the Germans gave up the island without resistance. Japanese marines destroyed all the German military

establishments and seized their munitions and supplies. About the same date Japan in the Carolines took Yap Island, the local seat of the German government in that area. Before the end of October, 1914, all Micronesia was in the hands of the Japanese. There was no fighting, as Japan displayed to the enemy naval strength far more than sufficient to render any real opposition impossible. Forthwith she set about reorganizing the government of the islands, and according to a statement made on July 17, 1916, in the British Parliament by Lord Robert Cecil, as foreign under-secretary, she was at that time administering the Carolines and all the Marshalls with the exception of Namu.

The Japanese navy had assisted in the hunt for the Emden ; it had helped to round up von Spee's vessels, which had escaped from Tsingtau on the outbreak of the war and finally were destroyed in the battle off the Falkland Islands. In addition to her obligations to Great Britain under the Anglo-Japanese alliance, the implementing of which was a matter for arrangement between the two Powers subscribing to the treaty, the supreme consideration of Japan in the war was the extirpation of German influence and the shutting down of German military or commercial activity in eastern Asia, with the complete cessation of all their disturbing effects. Her idea was the elimination of Germany in the Far East; and regarding the Far East as primarily and chiefly her military sphere, she in the main kept to it, while fulfilling her share in the general, world-wide campaign of the Allies against the Central Powers.

In the first months of the war the view found expression that Japan should be invited to cooperate with the other Allies by dispatching an army to Europe, and the figure of 500,000 men was sometimes mentioned in this connexion. At that time Great Britain had hardly begun to raise and equip the mighty armies which later she placed in the field. This greatly puzzled the Japanese, who could not understand how they should be asked to send soldiers to Europe when there were thousands of young men in the United Kingdom who were not in the British army, and apparently had no intention of joining the colours. However, in a remarkable interview which Baron Ishii, the foreign minister of Japan, gave to the correspondent of a French journal in November, 1915, official Japan said that Japan would send a very strong army to Europe if it seemed to be desirable, but that she had not yet even considered such an eventuality.

Japan was in thorough sympathy and in complete accord with the entente Powers—she herself was a member of the entente group. Besides her alliance with Great Britain, she had ententes with both France and Russia, though they did not go so far as did the alliance, which, initiated in 1902 and revised and extended in 1905 and 1911, provided, among other things—such as the independence and territorial integrity of China—that if Great Britain or Japan were involved anywhere in a war, arising from unprovoked attack or aggressive action by any Power or Powers, the other party to the treaty should at once come to the military assistance of its ally. In 1907 Japan formed ententes with Russia and France, and all the while a rapprochement was going on between Japan and Russia, which found expression in an agreement or convention in 1910, which pledged the two Powers to the maintenance of the *status quo* in China, leading the way in 1916 to another agreement, which was tantamount to a formal alliance; but it may be questioned whether anything of the kind would have come about so soon had it not been for the generous manner in which Japan assisted her old foe as regards munitions during the war.

Though Japan was thus allied with Britain and on cordial terms with the other two entente Powers, it should not be forgotten that she might not have joined in the war. She might have declared her neutrality. Indeed, there was a current of political opinion that was not friendly to the Anglo-Japanese alliance, affirming that that treaty circumscribed far too much Japan's action, particularly with respect to China. Moreover, there were some of the Japanese who believed that Germany would emerge victorious from the conflict. But neither of these was the view of Japan as a nation, nor was official Japan in the least responsive to them. On the contrary, Japan never hesitated, but from the outset sided with the entente.

Had she been content to remain neutral, and given no support to Great Britain, France, and Russia, the position of the Allies would have at once become most grave. The British would have had to keep a fleet at least equal to that of Japan (which at that time totalled upwards of 500,000 tons) for the protection of India, Australia, and New Zealand, not to mention the coast of western Canada. This would most seriously have affected the British naval dispositions in the North Sea and in the Atlantic, and have been of the utmost benefit to the German navy. The

French would have been forced to place in Asia several army corps, besides warships, for the defence of their Indo-Chinese possessions. Russia must have retained at least 1,000,000 troops in Siberia, and thereby her armies in Europe would have been that much the weaker. Japan knew all these things very well, but she had made her choice. Germany had in the past frequently attempted to come to an understanding with Japan, but long before the war Japan had made up her mind that her real friend, on every ground, was Great Britain and not Germany. Her eyes were opened to the want of sincerity in the protestations of Germany in 1894, when, after the treaty of Shimonoseki, by which China had ceded to her southern Manchuria, including Port Arthur, the kaiser induced France and Russia to join him in strong diplomatic action that resulted in her retroceding to China the Manchurian territory she had won in war. The Anglo-Japanese alliance of 1902 was a severe blow to German ambitions.

The struggle between the entente and the Central Powers had been foreseen by the statesmen of Japan, and they knew perfectly on which side she would stand when it broke out. In their opinion her action was the logical outcome of her policy during the years that had preceded the war, and they never wavered.

In the eyes of Japan the capture of Kiao-chau, though it was undoubtedly a fine achievement, did not appear a great feat of arms in comparison with the main events and incidents of the war; but what pleased her about it was that its moral effect in eastern Asia was very great in the undoing of German influence, to the utmost benefit of the Allies both by land and sea in the Far East. Another important feature of her operations in Kiao-chau was that the siege of Tsingtau immobilized several of the German gunboats, besides an Austrian cruiser, which otherwise might easily have done much mischief to such British centres as Hong Kong and Singapore. The rest of the German Asiatic fleet, which had got out of Tsingtau, was quite prepared to attack Australia and the islands belonging to the entente Powers in the southern seas, but both Great Britain and Japan took action, which effectually overcame this menace.

From the beginning of the war Japan's part in it, particularly in her naval operations, was of exceptional importance, and continued to be until the end of the war, all the multifarious services rendered by her warships being performed with remarkable energy and the highest efficiency. In the first year of the

struggle Japanese vessels protected the coasts of Australia, New Zealand, and British Columbia at a time when German cruisers still roamed the Pacific. The Parliament of British Columbia, indeed, placed on its records a public acknowledgment of the work done by the Japanese navy in the interests of that province and of Canada. After all the German warships had been swept from the Indian and Pacific Oceans, and the enemy merchant marine in these waters had been either captured or bottled up in neutral ports, such as those of the Dutch East Indies, the navy of Japan was never idle, though little was heard of it.

It was natural that, with the principal concentration of the British navy in the North Sea, with British patrols all around the shores of the British Isles and out into the Atlantic, and with the French and, later, the Italian fleets guarding the Mediterranean, the charge confided to Japan should be the eastern seas and the great ocean routes from Hong Kong to Vancouver, from Singapore to Suez and Zanzibar ; and she remained primarily responsible for them. Troops from Australia and New Zealand were convoyed to the Red Sea with the assistance of Japanese cruisers, not once but frequently. Now and then a glimpse of what was going on in this way was obtained by the general public, who else knew nothing about it, as when a notice appeared in the press of a presentation by members of the New Zealand Expeditionary Force of a silver model of a Maori war-canoe to Captain Kato, of the Japanese warship Ibuki, which had been one of the squadron protecting the transports bound for Egypt. Some at least of the Russian soldiers, who in 1916 were fighting in the trenches by the side of the French and the British on the western front, were embarked from Dairen, the Japanese port in Manchuria and the terminus of the Japanese railway which connects with the trans-continental line across Siberia.

A wider and better notion of what the Japanese navy was doing on the oceans of the East was obtained from a speech made in the Japanese Parliament by Admiral Yashiro, the minister of marine. He said that, subsequent to the occupation of Kiao-chau, the strength of the Japanese warships which were constantly employed in cooperating with the British navy was 225,000 tons, or, expressed in another form, was equal to nearly the total naval strength of Japan in the Russo-Japanese war. In carrying out the task that had been committed to her hands of guarding the Indian and Pacific Oceans, Japan used a naval

strength double that of the British eastern and Australian fleets prior to the war. When the war broke out the navy of Japan was most formidable, its total strength being about 650,000 tons, and all this was at the disposal of the Allies, if required; Japan put more than one-third of it as one of her contributions to the common cause. This took no account, furthermore, of the activities on the same behalf of her merchant marine. Though the activities of the Japanese navy were so incessant and so varied, they fortunately did not cost her much in ships, her only losses, and these of comparatively small consideration, being incurred in the Kiao-chau operations. During the siege of Tsingtau a third-class cruiser, the Takachiho, one destroyer, one torpedo-boat, and three steamers employed as mine-sweepers were destroyed by mines or gun fire.

In March, 1916, Japan performed an act which at once reflected credit upon her, and at the same time showed how utterly former animosities had disappeared. This was the return to Russia of the two battleships Sagami and Tango and the armoured cruiser Soya, vessels which had taken part on the Russian side in the Russo-Japanese war under the names of the Peresviet, Poltava and Variag. These ships had been sunk by the Japanese during that conflict, but they had been raised and refitted, rearmed, and transformed into fine fighting units. Japan did not hand back these warships to Russia without receiving value for them, but by restoring them she gave Russia a navy in the Pacific, and demonstrated afresh the goodwill she bore to that empire. In the early days of the war Japan was not so badly prepared for it as were most of the Allies, and she threw open her very considerable military stores for the common benefit. Thus, a part of Kitchener's new armies was furnished with Japanese rifles, and all the Allies except Italy had certain rifle supplies from Japan, who also provided some guns for the British navy. But it was on behalf of Russia that she worked wonders in manufacturing munitions, invoking for the prodigious effort all her industrial resources, and keeping at work, day and night, every available mill and factory in the country, besides the government arsenals.

Japan began to send munitions to Russia from the very outset of the war. In September, 1914, the correspondent of "The Times," London, in Petrograd reported that heavy siege guns, purchased from Japan on the outbreak of the war, were already

in position on the Russian front in Europe. In proportion to the enormous scope and protracted duration of the stupendous conflict Russia was but poorly supplied with munitions. She possessed no such resources, either in her government works or in her industrial communities, as were at all equal to what she required, but her lack of arms and supplies was not at first evident. It was only when it became known that the retreat of her armies from Galicia and Poland was entirely due to her shortage in munitions that her deficiencies came to be understood.

Prior to the fall of Warsaw in August, 1915, Japan had sent to Russia, to speak of rifles alone, a number sufficient to arm no fewer than 52 divisions, or, put in another way, something like 750,000. She had also dispatched to Russia a considerable quantity of field artillery and of heavy guns. It was after Warsaw had passed into the possession of the enemy that Japan, at the urgent request of the other Allies, greatly expanded her capacity for producing munitions, and mobilized all her mills, factories and plant of all sorts that was of use. In November, 1915, in the course of the interview already quoted, Baron Ishii, after mentioning that two Japanese arsenals were constantly employed in producing to their full power munitions for Russia, stated that of the troops Russia had mobilized or was mobilizing at that time only one-third was armed, and that Japan was arming the rest. It seemed a gigantic task; but it was fulfilled.

During the summer of 1915 Japan had experienced a political crisis connected with her domestic affairs which left its after effects. The marquis, then count, Okuma, one of the most distinguished and far-seeing among her leaders, was forced to resign the premiership, but the country rallied round him, and he came into power again. Yet, however much her politicians quarrelled among themselves, and feeling ran high in her Parliament, the making of munitions went on just the same. In October of that year the coronation of the emperor Yoshihito took place with all the time-honoured ceremonial of Japan, but the flow of arms into Russia never stopped for a moment. All through the winter of 1915-16 and the following spring, munitions were poured into the ports of Vladivostock and Dairen, and long processions of trains loaded with them were daily to be seen crossing the great Siberian plains to the Russian depots in Europe and the Caucasus. In 1915 Japan furnished Russia with munitions to the value of 200,000,000 yen, or in English money rather more than

WHERE FOCH DICTATED HIS TERMS. On November 10, 1918 the German government accepted the Allied terms for an armistice. The trains bearing Marshal Foch and the German plenipotentiaries met in a clearing in the forest of Compiègne, long marked only by the simple notice seen here. It was replaced by permanent memorials in 1922.

Imperial War Museum

RECORDING THE LAST ENGAGEMENTS. A cinematographer is seen here recording the last shot fired before the Armistice by British artillery near Maubeuge. This town was the advance base of the British in August, 1914, and was recaptured by them on November 9, 1918. The German acceptance of the Allies' terms for an armistice was announced by wireless on November 10, and on November 11 the historic "Cease Fire" telegram which was sent to the troops from headquarters ended hostilities.

£20,000,000 sterling, and in the first half of 1916 her production was of even greater value. Besides guns of all calibres, rifles, bayonets and ammunition, Japan sent large quantities of cloth and hundreds of thousands of boots for the Russian soldiers. In 1915 she provided for Russia 10,000,000 yards of cloth, 8,000,000 of which were made in Japanese mills, the rest being taken from the government stores. In many other ways she rendered prompt and efficient aid, and among them was the coining of silver into Russian roubles and smaller pieces in immense numbers.

Not the least item in the account of all that Japan did for Russia was the comparative cheapness of the munitions and other articles which she sold to the latter Power, and this important feature came from the low cost of labour among the Japanese —Russia got the benefit of it to the full. When the manufacturers of the United States supplied the Allies with munitions it was at a much higher figure. For example, Japan was able to let Russia have rifles at about 70 shillings each, whereas rifles in America cost something like twice as much. And there was this further difference between the United States and Japan. In the case of the former, private firms and establishments, spurred on principally by the desire for commercial profit, made the munitions ; but in the case of the latter it was the Japanese government itself—or that government standing behind and urging on, by giving assistance in cash or with practical advice, the private manufacturers of Japan—that directed, controlled, and ensured the tremendous output that was so necessary for Russia. Russia, as well she might be, was exceedingly grateful. She showed her keen appreciation of Japan's prodigious efforts on her behalf by sending an imperial mission, headed by the grand duke Mikhailovitch, a near relative of the tsar, to Tokyo, where it arrived in January, 1916.

More than thanks lay behind this Russian mission, as was seen when, in July, 1916, it was announced that a convention had been signed in Petrograd by the two Powers which blended their efforts to secure and preserve enduring peace in the Far East. By this agreement Russia and Japan undertook two things. First, each of the subscribers agreed not to become a party to any arrangement or political combination directed against the other. Secondly, they pledged themselves, in the event of the territorial rights or the special interests in the Far East of either, which were recognized by the other, being

threatened, that they would take counsel together with regard to the adoption of measures for safeguarding and defending those rights and interests. It was understood at the time that the two Powers had come to an arrangement respecting various definite matters of importance, and no surprise was excited when the further announcement was made in August that Russia, in recognition of the invaluable help Japan had rendered to her, had consented to make over to Japan that portion of the Chinese Eastern Railway which ran from Changchun to Harbin, and also had settled in favour of Japan a question as to the rights of Japanese shipping in the Sungari river, which had been in dispute since the treaty of Portsmouth of 1905.

As affecting the course of the war, the outstanding result of the convention was that it put an effectual stop to Germany's attempts to seduce either Russia or Japan from the number of the entente Powers or from the Pact of London, by which these Powers covenanted to make peace only by common consent. Germany had offered, not once but several times, a separate peace to both Russia and Japan, and this fresh agreement between these two empires was their reply. For a short time in 1915 it appeared that Japan might be involved in a war with China owing to China's refusal to admit that by wresting Kiao-chau from the Germans she was entitled to all rights which Germany had enjoyed in that district.

The situation was greatly strained for some months, but Japan was firm, and in the end China gave way. Japan secured valuable concessions, such as 99 year leases of the South Manchurian railway and the Antung-Mukden railway. She also had demanded from China an undertaking that the latter would not cede or lease any portion of her coastline or any of her islands to any Power except Japan, but on China issuing a proclamation that she would not alienate any part of her coastline or any of her islands to any Power whatsoever, Japan was content. Japanese who disliked the Anglo-Japanese alliance asserted that China had been let off far too lightly, and hinted that it was because of Great Britain. But the statesmen of Japan replied that they had no wish that Japan should pose as dictator in China, and that her policy remained based, as in the past, on the independence and territorial integrity of China, which was guaranteed by Japan and Great Britain, and virtually by France, Russia, and the United States.

The business of Japan, they said, was to help China to get on her feet, and to free her from pressure from outside, but meanwhile Japan could not afford that China should drift into anarchy. China was too near to herself for her to permit a state of chaos in that country, in which she also had large interests. Japan had to conserve her interests in China and elsewhere, for she was not a rich country in the same sense that Great Britain and France were rich. Her war with Russia had imposed on her a debt of £200,000,000, and the interest on it, together with the upkeep of her national services, had seriously burdened her people, some of whom complained of the necessary taxation, and protested that this or that service might be managed at less cost.

It so happened that Japan, when she declared war on Germany, had a surplus in her treasury of £10,000,000 sterling, which had been acquired by the most rigid economies spread over three years, and had involved the retirement of 3,000 functionaries. Financially, Japan was not a great Power, and this £10,000,000, so hardly come by, was a vast sum to her; but she devoted it to the war, and never asked her wealthy Allies for money. It also was the case that the general position of her trade and commerce was one of depression at that time, but there was a marked improvement, which set in during the latter half of 1915, owing to the large sums derived from the sale of munitions and from her shipping, though, as in other lands, some industries suffered considerably from the war.

Great Britain experienced a good deal of difficulty in paying in America for the enormous quantities of munitions and supplies which she had bought there, and the rate of exchange fell. Now Japan had £12,000,000 in gold deposited in New York, and she transferred the whole sum to Great Britain by taking British treasury bonds in London against the amount. The financing of Russia was also one of the difficulties of the Allies, and Japanese bankers helped by buying £5,000,000 worth of Russian bonds, and by promising to take a similar sum later. Japan also did something for France, for her budget for 1916 set aside £5,000,000 for the redemption of Japanese railway bonds, which had been placed in Paris before the war. Unlike that of her Allies, the debt of Japan decreased during the war, and by the end of the second year of the struggle her gold reserve had grown to £60,000,000. Of this sum she kept more than one half in London, where it was of great assistance to British finance.

CHAPTER 28

Propaganda's Aid to Victory

From the beginning of the war the Germans made far more use of propaganda, particularly in neutral countries, than any of the Allied governments. But in the last year of the war its value was more fully realized by Great Britain, and a campaign of intensive propaganda directed to the Central Powers was begun. There can be no doubt that it did much to bring about the collapse of Germany in the autumn of 1918.

An officer writing in a newspaper in the spring of 1919 on the cause of his country's defeat, declared that what caused the revolution in Germany was the feeling that the army was beaten, and that this feeling was largely due to the undermining of confidence in general headquarters by British leaflets. This was admitted at the time no less freely. In the "Cologne Gazette" of October 31, 1918, the statement was made by a high officer at the front that "what damaged us most of all"—during the retreat which broke down the fighting spirit of the German troops —"was the paper war carried on by the enemy, who dropped daily among us 100,000 leaflets, which were extraordinarily well distributed and well edited." A letter from a German officer which came into the possession of the Foreign Office in September, 1918, said that "if the Entente knew what poison the leaflets were working in the minds of the German soldiers, they would give up lead and bombard only with paper in future."

It has been suggested that the Allies made a grave mistake in not beginning their propaganda campaign earlier, and that what was done in 1918 might have been equally effective in 1917. But it is doubtful whether this view is correct. In the summer and autumn of 1918 Germany was feeling the stress of war far more acutely than the Allies. The food shortage was becoming more serious; the great forward push of March, 1918, had failed, and the Allies were beginning their own great offensive. Soldiers returning on leave were discouraged and dispirited. The Russian revolution had infected an appreciable number of German workers with communistic doctrines; revolution was in the

thoughts of many other Germans and the time was ripe, as it had never been before, to blow the smouldering discontent into flame. Propaganda at an earlier date might have had some effect, but active steps would have been taken by the German government to counteract it. When it came suddenly, like an avalanche, upon the stricken country in the summer of 1918, its results were remarkable.

In neutral countries the work of propaganda, in explaining British aims and the reasons which forced Britain into the war, was seen to be desirable at an early date, and the Right Hon. Charles Masterman was put in charge of it. A department was created with offices at Wellington House for the production and distribution of books, pamphlets, articles, maps, photographs of the destruction in Belgium, and all such matter as could enlist the sympathies of the neutrals. Many men of letters were employed in these activities. Not all their efforts were of equal value. The influencing of the minds and the emotion of foreigners is a difficult task, and has to be learned.

There was too great a reliance at first upon statements such as carried conviction and aroused indignation among the British people. There was too ingenuous an assumption that the foreigner would believe anything told against the enemy and everything good of the Allies. Further, a pathetic illusion reigned in the propaganda department that neutral nations were hungry for pamphlets containing reports of speeches by British statesmen, translated sometimes with professorial exactitude, but without the enlivening touch of colloquialism which alone can make such efforts readable. Tons of such pamphlets were shipped abroad and lay about in the back rooms of embassies, legations, consulates, accumulating dust. There was a lack of cooperation between the department and the Foreign Office. The War Office treated it sometimes with contempt, sometimes with suspicion.

Moreover, the instructions given to those engaged in propaganda in neutral countries were inadequate. For instance, in Spain the Englishman in charge of propaganda did not know in the spring of 1917 what policy he was required to support. He could get no instruction as to whether the Foreign Office wished to keep Spain neutral, or to secure her as an ally, or to induce her to break off diplomatic relations with Germany. In another neutral country there was a War Office agent, an Admiralty

agent, and an agent from the propaganda department, all three working in watertight compartments. Frequently the efforts directed from Wellington House were made of no account by utterances of British leaders taking an exactly opposite line. There was a complete lack of co-ordination, of united drive, in the attempts to keep neutral opinion favourable to the Allies.

Such endeavours as were made in Russia to teach Allied populations to value what Great Britain was doing were, for the most part, pitiful in their ineffectiveness. Mr. Hugh Walpole, the novelist, who was engaged in this work in Petrograd, has spoken of it in "The Secret City" with scornful amusement. That Mr. Masterman's department managed, in spite of all obstacles thrown in its way, to accomplish so much, reflected the greatest credit upon the staff at Wellington House, London, most of them young men, enthusiasts, ready to devote all their time and energy to the work in hand, if only their energies could be given free play.

After a time the Foreign Office also set up a propaganda section with Mr. John Buchan at its head. He had been employed at general headquarters with the rank of lieutenant colonel, and took up his new duties with eager hopefulness. But he, too, soon found that the official attitude was hostile to any wide and vigorous propaganda campaign. Lord Newton was another who for a while was entrusted with some supervision of the Foreign Office side of the work. The Foreign Office share in propaganda was, on the whole, ineffective. This was due more to inherent defects in the machinery of the department and to lack of imagination than to any fault or negligence on the part of those who were in charge. Wellington House did far more. Indeed, it may be said that whatever was achieved in the way of influencing neutral populations was the work of Mr. Masterman's staff.

The most lamentable omission from the efforts which should have been made was the failure to appreciate justly the value of propaganda in enemy countries. The inception of this side of the work was due to the initiative of one man, supported by Mr. Masterman, but grievously hampered by official neglect in other quarters, and by Treasury unwillingness to allow money to be spent. It was Mr. S. A. Guest, a barrister in the national insurance department, who set up a little enemy propaganda department in Victoria Street, and for two years worked almost

single-handed at the task of making Germans understand how hopeless was their position and how flagrantly they had been deceived. This effort, which in the end developed into an offensive of such magnitude and value, grew out of support given, at Mr. Guest's suggestion, to a Dutch gentleman who was smuggling into Germany printed matter setting forth the Allied case. After a time Mr. Guest began to do this himself through an agent in Holland. Later he worked through Denmark and Sweden, and created an organization in Switzerland with a man at its head who proved himself a positive genius in this kind of work. Hampered by lack of funds, and condemned to periods of inactivity whenever there were changes in the direction of the propaganda agencies, Mr. Guest, though seeing how much might be done, was often tempted to throw up the work. But he hoped always that a time would come when his ideas would have larger scope. Little by little he built up the framework necessary; and when Lord Northcliffe took him over and gave him a free hand his faith and all the labour which he had expended were amply justified.

Within the limits imposed, Mr. Guest's small propaganda section did good work. General von Hutier, in his order to the German 6th army denouncing British efforts to lower the German morale, mentioned that "books and pamphlets were concocted which presented the appearance of having been printed in Germany and bore, for example, the title of the Reclam series." This was one of Mr. Guest's devices. A harmless-looking little volume with the name of a German classic on the cover would turn out to be a record of atrocities committed by the German army in Belgium. Disguised as a school arithmetic book there would be smuggled into Germany a full account of the negotiations between Serbia and Austria and the subsequent exchange of dispatches which ended with the declarations of war. Sometimes Mr. Guest had direct evidence that his labours were being rewarded. On the Danish frontier his emissaries were so successful in working among the German sentinels that the troops in this region had to be changed, their spirit, so an order stated, had been completely undermined.

The production of leaflets on a large scale which began in July, 1918, was immediately followed by denunciations in the German press. Instead of concealing the harm done by them, German ministers and writers and even the German commanders in the

field paid tribute to their efficacy. It was explained exactly how they were depressing the enemy's courage ; and British efforts in the direction indicated increased tenfold.

It was not until early in 1918 that the War Cabinet gave sign of comprehending that propaganda, and especially propaganda in enemy countries, might be a means of shortening the war, and Lord Northcliffe was asked to undertake the direction of the work. Lord Beaverbrook was put in charge of propaganda in neutral countries. He became known as minister of propaganda, though no such office was, in fact, existent. He was in the ministry as chancellor of the duchy of Lancaster. The effect of the change, so far as the neutrals were concerned, was not great. The work had all been by this time organized under capable heads into sections which kept up a constant flow of material. Lord Beaverbrook appointed several business men as heads of certain sections.

Indeed, Lord Beaverbrook's instructions from the premier seemed to be that he should cut down expenditure rather than enlarge the work, which was now being mainly done in the Howard Hotel, close to the Temple, to which in a short time Horrex's Hotel across the street was added in order to accommodate the greater part of the Wellington House staff. There was now a very large export of literature to the Netherlands, Switzerland, Scandinavia, and Spain. Each of these countries was in charge of a "national," and there were nationals also for the Allied countries, for the several Dominions, for India, the United States, the countries of South America, and other parts of the world.

In each country there was a branch working under the direction of the national in London. Thus close touch was kept with the developments of opinion and sentiment, and the supply of propaganda was restricted or increased, changed in character or maintained upon established lines, according to the counsel of the men on the spot. Twice a week the nationals met to discuss their work, to secure themselves against overlapping, to pick up hints from each other and from outsiders who volunteered advice, to keep each and all informed of what the department was doing as a whole. This meeting, known as the moot, was presided over with businesslike, and at the same time sympathetic, ability by Mr. Masterman; in a short space of time it got through a large and valuable amount of work.

Lord Northcliffe's first duty after accepting the appointment of director of enemy propaganda early in February, 1918, was to find a home for his department. He was fortunate enough to secure, by the public-spirited consent of the marquess of Crewe, Crewe House, in Curzon Street, Mayfair. Here there was ample room and, not less important, there was quiet. It was important that the work to be done should be done as secretly as possible. Many considered it an error of judgement to announce Lord Northcliffe's appointment, but this was proved by the event to have been a wise step, for the Germans and Austrians were so much disturbed by it that their nervousness was noticeably heightened.

Henceforth they saw Lord Northcliffe's hand in every turn of the wheel. So much did they fear him that from this time onward they attributed to him the growing dissatisfaction in Germany and Austria. Every disquieting rumour was said to have come direct from the "Northcliffe Lie Factory." Upon settling in Crewe House, Lord Northcliffe gathered round him at once a number of men specially qualified to influence opinion among the enemy. Many of these were journalists accustomed to the persuasive setting forth of arguments, and fitted by intimate knowledge of the Central empires to choose the arguments most likely to appeal to their populations. Among them were Mr. Wickham Steed; Sir Roderick Jones, then managing director of Reuter's Foreign Telegram Agency; Mr. Robert Donald, then editor of "The Daily Chronicle"; Sir Sidney Low, a publicist of large experience; Dr. Seton Watson, and Lieutenant Colonel Campbell Stuart, a young Canadian, who in time became assistant-director of the department.

The first campaign to be put in hand was that against Austria. In the spring of 1918 the Germans were apparently so confident of victory that for the moment direct propaganda in or against Germany appeared to offer few prospects of success. In Austria the conditions were different. Here, there had long been a promising field for energetic effort to detach from their allegiance to the empire of the Hapsburgs those nationalities, comprising three-fifths of the entire population of Austria-Hungary, which longed for independence, and which were, therefore, either actually or potentially friends of the Allies. Mr. Wickham Steed had before urged that this effort should be made, but nothing had been done until the Crewe House organization came into being.

Now Mr. Steed was able to carry out his plan himself. The one difficulty in the way of its success was the treaty by which Britain, France, and Russia had bound themselves, before Italy came into the war, to allot to her certain territories inhabited by Southern Slavs. It was necessary to convince the Southern Slavs that the Allies would help them to determine their own form of government, and would guarantee to them the territories in which they had a decided majority of the inhabitants.

Before this could be done the consent of Italy to these conditions had to be obtained. Mr. Steed's long residence in Rome as correspondent of " The Times," and his acquaintance with all the leading Italian politicians, as well as those of south-eastern Europe, made it easier for him than it would have been for any other negotiator to draw the two opposing views together. By means of a series of conferences—first in London, and later on in Rome—the differences between these views were whittled down until at a Congress of Hapsburg subject races in April, 1918, the Italian government agreed to put no obstacle in the way of the attainment by the Southern Slavs with Allied assistance of their national aims and legitimate ambitions.

The Rome Congress was really a remarkable act of constructive inter-Allied propaganda. Nothing of this kind had been attempted before. Between the Scylla of alienating the Southern Slavs by allotting to Italy districts inhabited by them against the will of the inhabitants, and the Charybdis of arousing in Italy a sense of national loss and humiliation by abrogating the London Treaty, a way was found which satisfied the Slavs and yet left Italy without a grievance. She was given the leadership in the whole process of liberating the subject Hapsburg people, a rôle in tune with her best traditions. Unfortunately, Italy did not maintain during the peace negotiations the attitude she took up at this period of the war; but at the moment it was felt that a great advance had been made, and from that time the work of detaching the subject races from the Austrian empire went on with marked success.

The ground being thus cleared, it was possible to begin work. A general idea had been drawn up and submitted to the War Cabinet. In a letter to Mr. Balfour as early as February 24, Lord Northcliffe had outlined two possible policies. One was to work for a separate peace with Austria-Hungary by undertaking not to interfere in the internal affairs of the empire,

and to leave its territories almost or quite intact. The objection to this was that, even if the emperor and his advisers were inclined to make peace, they were under the control of Germany and had not the power to break away. Another objection was that, if this were done, the Allies could not fulfil their obligations to Italy, to whom they had promised Austrian territories inhabited mainly by Italians, on her coming into the war.

The alternative policy was to try to break the power of Austria by encouraging the nationalities which were eager for independence and which had no sympathy with the Germans, whether in Germany or in Austria itself. It was this which Lord Northcliffe recommended, and his letter to Mr. Balfour set forth methods which could be used in following it. Mr. Balfour's reply to what he called "this very lucid memorandum" was indecisive. He suggested that the two policies were not mutually exclusive, involving distinct and even opposite methods of propaganda. In fact, he showed plainly a desire to keep a free hand in regard to the first, while agreeing that the second should be tried. This decision, presented to the War Cabinet, put an end to the flickering notion which had all along been in the minds of a certain group in the Foreign Office that it was possible to make a separate peace with Austria.

Before the Rome Congress was held Mr. Wickham Steed had been sent to Italy by Lord Northcliffe at the head of a small special mission to establish an Inter-Allied Propaganda Organization which should prepare and distribute among the Austro-Hungarian troops of subject nationalities leaflets inciting to revolt. After the congress this organization began work. It distributed millions of leaflets by means of aeroplanes, balloons, contact patrols, and rockets fired into the enemy's trenches. It published a news-sheet designed to persuade the nationalities concerned that their only hope of independence lay in turning against Austria and assisting the Allies to compass her downfall. It sent gramophones into the front-line Italian trenches to play Southern Slav and Czecho-Slovak national songs and turn the thoughts of those who heard them to their patriotic aspirations.

The result of these activities was seen in the increased number of desertions from the Austro-Hungarian ranks. Among the deserters were many junior officers—not professional soldiers, but men who had been lawyers, manufacturers, or merchants. They admitted that they were induced to desert by the prospect

of liberation which the leaflets held out to them. Nearly all those who came over into the Italian lines to surrender had with them copies of these publications. That the Austrian army authorities were soon alarmed by the success of the new propaganda was made clear by references to it in army orders, and by articles in the Austrian and also in the German newspapers abusing Lord Northcliffe.

For some time after the creation of the enemy propaganda department, propaganda among the German troops on the western front was left in the hands of those who had been carrying it on hitherto. Mr. Guest continued the work he had ably organized of securing the circulation in Germany of books, pamphlets, articles, and information in every form. A subsection of the War Office went on preparing at Adastral House leaflets to be dropped by balloons over the German lines. In this task Dr. P. Chalmers Mitchell, F.R.S., took the leading part. He had for a long period been studying German propagandist literature. Early in 1917 the War Office issued a valuable analysis from his pen of over 2,000 books and pamphlets of enemy origin. His sub-section sent out reproductions of letters written by German prisoners of war describing the comfort in which they lived and the abundance of their diet; a weekly newspaper for French and Belgian civilians in districts occupied by the enemy, called "Le Courrier de l'Air"; and a series of leaflets, begun early in 1918, of which during six months some 12,000,000 were sent to France. These were distributed by paper balloons, a method much employed by the enemy. For a short time in 1917 aeroplanes had been used, but two British airmen who were captured were tried by court-martial, and threats were made that any others detected would be very severely treated. The British army authorities then decided that aeroplane distribution of propaganda must cease.

During the late autumn and winter of 1917 efforts were made to hit upon some other system of dropping leaflets. The aerial inventions board and the munitions inventions department lent their aid. Every device which seemed to have in it any promise of value was taken to France by Mr. Chalmers Mitchell and discussed at general headquarters. At last, early in 1918, it was decided that paper balloons would give satisfactory results. Designs and apparatus had been tested in workshop and laboratory, also at experimental stations near London and on Salisbury

Plain. Then the balloons were taken out to France and tried under actual conditions of war. They were made of paper cut in 10 longitudinal panels, with a neck of oiled silk about 12 inches long. The circumference was about 20 feet; the height, when inflated, just over eight. One hundred cubic feet of hydrogen gas could be pumped into the balloons, but they were not sent up quite full; 90 to 95 cubic feet was the usual charge. For two or three hours there was no appreciable evaporation of the gas. The problem which caused the most labour of thought to the inventors was how to prevent escape. Hydrogen passes quickly through paper; it was necessary to hit upon a varnish which would make the paper gas-tight.

This was at last found, and the balloons were thenceforward capable of floating for 36 hours. Each carried from 500 to 1,000 leaflets according to size. These were dropped by an ingenious mechanical device, adopted after many others had been tried and found wanting. Cotton wick of the kind used in flint pipe-lighters, which burns evenly at the rate of one inch every five minutes, was threaded to a wire; by the wire it was attached to the neck of the balloon. The leaflets were strung along the length of the fuse in small packets, which broke as soon as they began to fall. For work over the enemy's trenches the packets were arranged so as to fall every two minutes and a half. When the balloons were sent upon longer voyages the interval was longer.

The balloon stations were placed a few miles behind our front line. The distribution units consisted of two motor-lorries containing a few men, the leaflets, and the cylinders of hydrogen. The weather was closely watched and the spots for sending off the balloons chosen by the meteorological officers. Fortunately, the wind was from the west nearly all the late spring and summer of 1918. If it had not been for this piece of good luck British propaganda would have been nothing like so effective as it was; for up to the late autumn it had to depend upon balloon distribution until the use of aeroplanes was again allowed by the army authorities. As early as May 8 Lord Northcliffe wrote to Lord Milner, then minister for war, suggesting that they should be again employed in this work. Lord Milner replied that Sir Douglas Haig had temporarily decided against it, but added: "We hold ourselves free at any moment to resume it." On June 11 the committee of the propaganda

department resolved to press the matter still further. Lord Northcliffe wrote again to Lord Milner saying: "Our work is severely handicapped by our disuse of this method of distribution, and if, as I am informed, the Germans themselves continue to drop leaflets over our lines from aeroplanes, our attitude seems to me perfectly incomprehensible." The reply this time came from the War Cabinet and was to the effect that the general staff did not consider it right to subject airmen to the risk of reprisals with which they were still threatened. In July the War Cabinet overruled the general staff, and agreed that aeroplanes should be used, but now the air ministry (Lord Weir) raised further objection. For nearly three months this objection was maintained. The War Cabinet took no step to enforce its decision thus set at naught. Only in October was Lord Weir's opposition withdrawn. At once the preparation of leaflets for the interior of Germany was taken in hand. In one week five tons (3,000,000) were got ready and the distribution was started.

The printing arrangements now came under the direct control of the German section, instead of being left to the Stationery Office. By the beginning of August daily bulletins of war news and leaflets explaining to the Germans the hopelessness of continuing the struggle were being produced with the speed of a daily newspaper, and dispatched to France within 48 hours of their being written. During August the number of leaflets dropped over the German lines reached a figure well over 100,000 a day. This was kept up until the end. Written in simple language, they aimed at letting the enemy troops know the truth, which was being concealed from them by their leaders.

They gave information as to the progress of the Allies in all theatres of war; showed at a glance, by means of shaded maps, the territory gained. They laid stress upon the large numbers of Americans arriving daily. By diagrams the steadily progressive increase of the United States forces was strikingly illustrated. The heavy German losses were continually being chronicled, and the futility suggested of making further sacrifices in a losing cause. The leaflets were infinite in their variety. They appealed now to reason, now to the instinct of self-preservation, now to religious sentiment. They dealt also with political questions of interest to the German rank and file. The general idea followed was to approach every matter handled as it would be approached by Germans of progressive mind. The

British point of view was carefully suppressed. The writers of the leaflets did their best to penetrate German psychology. Many of their productions were got up to resemble the propaganda of German revolutionary groups, and purported to be issued by "the committee for freedom and progress." A trench journal was issued, with a weekly circulation of 250,000, so written and illustrated as to resemble a German production. The title was changed every week or two. Sometimes it was the "Heimatpost," sometimes "Herbstliche Blätter," and so on. The endeavour was to make it readable and amusing, as unlike the dreary "Continental Times" as possible (this was a paper which the Germans used to drop over British trenches, consisting mostly of immensely long and dull articles, quite unintelligible to the average soldier mind). A good deal of comic matter was included; the propaganda pills were thus carefully hidden in generous spoonfuls of jam.

In a very short while the German commanders showed that they were seriously disturbed by this paper warfare. In the standing orders of the 11th reserve division appeared the following notice, which was typical of many: "The distribution of propaganda leaflets from English aeroplanes and balloons has of late considerably increased. It is the duty of every officer and man immediately to hand over such leaflets. Any officer or man found to be in possession of such leaflets or attempting to send them home is to be very severely dealt with." A great many, nevertheless, were sent by soldiers to their relations and friends in Germany. A little later, therefore, the offer of rewards was tried in place of threats. In the "Weissenbürger Zeitung" of August 29 was published this announcement: "It is forbidden to keep pamphlets, books, leaflets, or pictures of the enemy propaganda. For fresh specimens given up to the military authorities will be paid: three marks (three shillings) for the first copy, thirty pfennigs (fourpence) for other copies, five marks (five shillings) for a book."

At the same time, public opinion in Germany grew uneasy. Every day the newspapers attributed fresh triumphs to the British propaganda, and complained that there was nothing on the German side to approach it. In the Berlin "Morgenpost" the minister for war, General von Stein, admitted that "in propaganda the enemy is undoubtedly our superior." The organ of Krupps, the "Rheinische-Westfälische-Zeitung," wrote: "The

British propaganda department has worked hard. Had we shown the same activity in our propaganda, perhaps many things would have been different now. But in this, we regret to say, we were absolutely unprepared." In the same strain of reproach the "Deutsche Tageszeitung" said: "We have a right to be proud of our general staff. We have a feeling that our enemies' general staff cannot hold a candle to it. But we have also the feeling that our enemies have a brilliant propaganda staff, whereas we have none."

North and south there grew an identical feeling of vague disquietude and distrust. In the Bavarian lower house of parliament the Bavarian minister for war, General von Hellingrath, spoke angrily of rumours in circulation which, according to the Munich correspondent of the "Cologne Gazette," were "so wild and extravagant that one hardly understands how they can be credited." These rumours, the minister said, were "nothing but the result of the industrious and determined agitation which our enemies carry on in the interior through their agents." In the Berlin "Lokalanzeiger," the editor, Herr von Kupffer, declared that these same rumours had produced in the north of Germany "a carnival of soul-storms, idiotic terror, and criminal irresponsibility. One would have to be blind," he continued bitterly, "not to see that these things radiate from that organization in England formed to shatter the German nervous system by means of shameful and impudent lies. Is not the figure of Lord Northcliffe, the great propaganda chief of the English home army, pilloried in world history for all time?"

As to the effect of the effort in and around Hamburg, the shipping journal "Hansa" said on September 14: "At every step and turn we meet despondency, discontent, depression, hanging heads, grumbling. . . . Whence came they? Who brought them to us? To-day we know. To-day we can recognize the origin of this depression of German will-power. It was the long-advertised publicity offensive of the Entente, directed against us under England's lead and under the special direction of that unprincipled, unscrupulous rascal, Northcliffe."

Testimony to the discouragement caused in the ranks was given in the "Kölnische Volkszeitung" of September 11: "Leaflets circulated to cause low spirits and despair," said a letter from the front, "and to send deserters over to the enemy are being showered down in thousands. It is this combat, waged openly

or secretly, which, particularly at home, produces depression and anxiety. In the leaflets you find statements that Hindenburg was once regarded as a divinity, but that his laurels are beginning to fade as the enemy advances farther every day; that our troops have lost heart; that whole companies surrender, and so on." To such a length was morale lowered that, early in September, Field Marshal Hindenburg issued a long and painfully anxious appeal to the nation and the army. "The enemy knows," he said, "that Germany cannot be conquered by arms alone. The enemy knows that the spirit which dwells within our troops and our people makes us unconquerable. Therefore he has added to the struggle against German arms a struggle against the German spirit. . . . He bombards our front not only with a drum-fire of shells, but also with a drum-fire of printed paper. Beside bombs which kill the body, he drops from the air leaflets which are intended to kill the soul."

The number of leaflets had, Hindenburg said, increased very largely during the summer. In May 84,000 had been handed to the authorities by "our field-grey men"; in June, 120,000; in July, 300,000. But this was nothing to the increase which was noticed during the autumn. In August the enemy propaganda department issued 3,958,000; in September, 3,715,000; in October, 5,360,000. Passionately the German commander-in-chief implored his countrymen not to be "deceived." Fiercely General von Hutier, of the German 6th army, abused "the most thorough-paced rascal of the Entente, Lord Northcliffe, minister for the destruction of German confidence," and asserted that the German soldiers could see through his machinations.

It was too late for entreaty, too late for belief in the German soldier's imperviousness to the truth. Early in the war General Hindenburg said that the winners would be the side which had the better nerves. Hitherto the Allies had made no effort to shake the nerves of the Germans by the method which lay so plainly near to hand. Now the British were using this method, telling them the truth about the origin of the war, about the failure of the U-boats, and about the American numbers. Every possible way into Germany was used for the passage of this truth. From Holland, from Switzerland, and from Scandinavia there were secret avenues for books, pamphlets, newspapers, and newspaper articles.

CHAPTER 29

Welfare Work

IMMEDIATELY on the outbreak of war, plans were set afoot in the United Kingdom, and throughout the empire, to aid and to send comforts to soldiers in the camps at home and at the front. A vast network of activities sprang up—apart from the work of the army chaplains and of the Red Cross—covering every phase of the soldier's life. London, the heart of the empire, and the centre to which most of the troops came, either on duty or on furlough, led the way, and the example of London was followed by every city and town, large or small.

On the various fronts, from Flanders to German East Africa, these efforts continued on an even larger scale. Philanthropy invaded the very field of battle itself. In fight after fight Y.M.C.A. workers were to be found close to the front lines, under the heavy shell fire of the enemy, working with the Red Cross, providing cocoa and other aids for the wounded and the stretcher-bearers. Volunteer workers helped in every rest camp to organize sports, to provide lecture courses, and to give concerts. Big theatrical and concert parties from England, including many musical stars, regularly visited the fighting troops. Ladies devoted themselves to the wounded soldier, providing comforts for him in hospital. The journeys of near relatives from the United Kingdom to visit the dangerously wounded at the French base were systematized, and care, sympathy and attention provided for them. Even when men died far from home there were organizations to visit their graves on behalf of the mothers, wives and sweethearts who could not come, to put wreaths on the coffins and to gather some flowers from the graves and to send them to the mourning relatives.

Tens of thousands of troops from the front and from the camps in the United Kingdom arrived in London on furlough each week. Some of these were merely passing through, going straight from Charing Cross or Victoria to Euston or King's Cross and catching the first train to their homes in the north. Very many, however, remained. Numbers had never been in

London before or had no friends or relations there. They had their leave pay in their pockets. They were mostly in a mood of reaction from the drab and hard experiences of camp or trench. They were craving for brightness, cheerfulness, good company and change. Every train bringing soldiers in any number to London was met by volunteer workers, nearly all of them business men over military age and working at war pressure at their own occupations. These gave the newcomers all the information they required, conducted them to clubs if they wished to go to clubs, and assisted them in whatever way they could. There were free refreshment stalls at many of the stations, at which men on leave could obtain food and drink.

At night there were motor-cars, lent by their owners, to take the men wherever they wanted to go. There was no need for any man to wander around the streets seeking for company, or to go wrong for want of a friendly hand. There were no fewer than 90 clubs, huts, rest-houses and the like, all properly controlled, supervised, and approved by the general officer commanding the forces in London. Most of these rest-houses were of a considerable size, some containing 500 or 600 beds, or even more.

Special entertainments and festivals were arranged for special seasons. At Christmas, for example, most of these huts acted as the main dispensers of London's hospitality to the soldier, freely entertaining tens of thousands of troops to Christmas fare and giving them a Christmas welcome, with music and song and often dancing as well, with Christmas-trees and presents and everything that possibly could be done to convey the spirit of home. Every soldier, however strange to London, was aware of these places. Big notices in the railway stations and all over London advertised their addresses. The troops were officially told of them before they left camp. There were information bureaux, as, for example, the Châlet, in Trafalgar Square.

Some of these establishments were for all troops, while others were for special sections only. The Canadians had an admirable series of Maple Leaf Clubs in large mansions in the West End of London. The Australians had, in addition to other places, the Aldwych Theatre. The most prominent night club in London, Ciro's, was taken by the Y.M.C.A. and transformed into a social institution where there were constant entertainments, and where the soldier could receive his lady friends amid comfortable surroundings. Nor was provision made for the

private soldier alone. A number of clubs, social rooms and hostels catered for the officers. The Automobile Club, in Pall Mall, became an overseas officers club.

The railway buffets and the hostels near the railway stations were among the sights of London. Throngs of men would arrive at the buffets fresh from the front lines in France, with the mud of the trenches still on them, with steel helmets tied behind their backs and with rifles still in hand. Their immediate needs satisfied, they would flock to the huts while waiting for their trains, and there, many a night, could be seen crowds of men filling every seat, men in rough sheepskin coats and leather waistcoats with thick, strong boots, heavy with the mud of Flanders, recalling experiences with old comrades, dozing, eating, sending telegrams, waiting for the morning trains.

A great deal was done to provide private hospitality for soldiers, particularly overseas soldiers on leave from the front. Thousands of families gave in their names as always willing to welcome soldier guests, and had one place at their tables waiting for a stranger. Various organizations undertook to keep registers of such offers, and to put the people offering hospitality and the soldiers in touch. Citizens of London, proud of their city, volunteered to act as guides, and day after day parties in chars-à-bancs explored the sights of London. Everywhere they were welcomed. Theatres made it a rule to give large numbers of free seats to wounded soldiers, and some places of entertainment even advertised that wounded men were always welcome to seats in their houses. A popular actor-manager started a plan of Sunday evening concerts for men in uniform at the Princess' Theatre, concerts where the only ticket of admission required was the khaki uniform.

This idea was taken up by others, notably the Victoria Palace, just outside the great terminus, Victoria Station. The best proof of how the men appreciated the entertainment was given by the crowds that attended every performance. Some of the leading West End squares were handed over to the Y.M.C.A. authorities for the erection of recreation and dormitory huts, and in some cases the inhabitants of the squares paid the cost of the huts and saw to their maintenance. Hostels were opened for officers, and thousands slept there.

Special efforts for soldiers were undertaken by numerous organizations, some of them representing particular religious

groups, such as the Church of England, Roman Catholic Church, and the Salvation Army, while others, like the Young Men's Christian Association, drew their supporters from wider fields. When war broke out the military authorities appealed to the Y.M.C.A. to provide recreation centres for the troops in the camps at home. Within a fortnight 200 centres were started. By the beginning of 1918 these had grown to over 2,000 centres under the British flag, reaching from Jaffa to Ypres and from Bagdad to Aberdeen. In France alone there were 500 centres, many of them close to the front lines and under constant shell fire from the enemy. The tents which were first erected gave place to more permanent buildings, and over £1,000,000 was spent in three and a half years on these buildings alone. The initial work of providing comforts grew into a hundred diverse agencies.

In East Africa the Y.M.C.A. provided the entire canteen arrangements. At the bases in France the Y.M.C.A. workers met friends going to visit the wounded and dying, conducted them to their destinations, housed them, and fed them. There were Y.M.C.A. huts in prison camps, and the Y.M.C.A. acted as a leading relief agency for British soldiers when they emerged from Germany to internment in Switzerland and Holland. Y.M.C.A. agents provided shelter for men passing through London on leave, and 18,000 men slept in the different Y.M.C.A. huts in one week in London. The association was responsible for numerous lecture schemes for the troops in France, and out of this grew a great educational movement for the soldiers. The old restrictions about smoking, secular games and entertainments were almost wholly swept by the board.

New machinery was necessary to meet new conditions. A fresh central body was created, the emergency war work committee, which took all responsibility for the war work, raising funds and administering them. The chief organizer was Sir Arthur Yapp, who revealed such administrative ability that later on he was given the direction of the national food economy campaign. Sir Arthur Yapp was backed by an admirable colleague in the assistant national secretary, Mr. F. J. Chamberlain. The chairman of the committee was Sir Thomas Sturmy Cave, the well-known engineer. The financial organization of the war movement owed much to an Anglo Indian, Sir Henry E. E. Proctor. At first a modest special fund of £25,000 was asked

for. Early in 1918 the voluntary gifts for the work amounted to £1,250,000, and the daily expenditure had risen to £1,850.

Perhaps the most remarkable feature of the support given to the Y.M.C.A. was not so much the amount raised as the way in which it represented the entire nation. Every class of the community subscribed to it. The king, its patron, sent a message saying how the organization had "worked in a practical, economical, and unostentatious manner, with constant knowledge of those with whom it had to deal." Army commanders wrote urging its claims. Some ragged boys, pushing themselves into the Euston hut, when asked what they were doing there, said that they had come to see how their money was spent. Their school had subscribed its pennies to help. Between king and street-boys the whole community joined in, the heads of the universities, the chapters of cathedrals, the lord mayors and mayors of cities, the heads of the navy and the army, the theatrical and musical professions—all made common cause. The churches naturally gave it generous aid. But this aid was by no means confined to Christian communities. When the Jewish Chief Rabbi returned from a visit to France he wrote to "The Times" appealing for aid for the Y.M.C.A. and testifying to its magnificent work.

At the beginning of the war the first idea was to erect recreation marquees and centres for the men. The marquees were replaced by huts, and these huts tended to grow more and more elaborate as they were more and more used, until there were some that cost £6,000 each, and even more. Gradually the work extended to wherever the British army was found. A number of huts were built in France. Starting at base depots on the coast, they went from Dixmude to Ypres, from Ypres to Armentières, around Loos and behind Souchez, in Arras and Albert, everywhere right up with the fighting troops. Some of the centres were in barns and semi-ruined buildings, some in cellars when under bombardment, some in dug-outs in the trenches. The service done in these different depots included not merely the provision of warmth and comfort, but the creation of real centres of life for the men. Here they could get out of touch for the time with the drab misery of war. Here they found food different from regulation rations, warmth, light, friends, books.

When the British army went to Gallipoli the Y.M.C.A. went with it, and did good work in the hill caves. The work in

Egypt presented some of the most spectacular sides of the Y.M.C.A. campaign. In Cairo the famous Esbekieh gardens, skating-rink and open-air theatre were taken over and made into a great centre of social life. Y.M.C.A. men accompanied the army across the desert to Palestine, and a Y.M.C.A. branch was opened in Jerusalem not many hours after the British general moved through. At the Khargeh oasis, away west of Mersa Matruh towards the Tripoli frontier, the Y.M.C.A. planted itself with the British outposts.

It had stations all along the Suez canal, and Tel-el-Kebir was an important depot. There were camps around Alexandria, and at Sidi Bishr there was a large rest camp for men exhausted by their desert work. The imperial aspect of the work came out in the very thorough campaign among the Indian troops and in India. In Mesopotamia the Y.M.C.A. shared the glories and trials of the troops, and established itself there from the Persian Gulf to Bagdad. In addition to the work for the army, a very extensive campaign was opened for munition workers. A farm colony was established for tubercular patients. In Holland and in Switzerland there were big Y.M.C.A. centres for the prisoners of war.

The work grew in different ways naturally and inevitably. Libraries, mainly of fiction, were established at different stations. It was soon found that there was a demand for other books than fiction, and these were provided. There were popular lecturers and preachers and teachers of all types travelling through the camps in Britain and France and elsewhere to speak to the men. Here again the authorities found a growing demand for more serious subjects than had perhaps at first been anticipated. It took time to realize that with a fresh opportunity for service a fresh duty was emerging. Here was an army of young men, civilians taken for a few years from their civilian life, temporary soldiers who when the war was over were to return to their civilian avocations. Could not the Y.M.C.A. use its machinery to educate the men and to prepare them for their return to civilian life? Out of this idea grew a scheme which in the end was to overshadow many of the other Y.M.C.A. activities—the great educational campaign for the army.

The work of the Canadian Y.M.C.A. for Canadian troops was not at first as widespread as might have been expected. The men in charge were left largely to their own resources.

They had no considerable funds to draw upon save what they could raise by themselves. It was not, indeed, until the spring of 1916 that the workers came together in a definite organization. In spite of this early want of cohesion and organization, admirable work was done from the first. The Y.M.C.A. officers were men of the right type.

When the Canadian 1st contingent was raised in August, 1914, and stationed at Valcartier before proceeding to England, six Y.M.C.A. workers started their great task. All kinds of small traders flocked around the camp, starting little businesses to supply the soldiers, and charging extortionate prices, such as 10d. for a loaf, and 10d. for an ordinary 3d. packet of cigarettes. The military authorities asked the Y.M.C.A. to open a canteen, selling everything at ordinary rates. Within 24 hours this was done, and the outsiders were ordered to close down. This work at Valcartier was so much appreciated that, at the request of Sir Sam Hughes, then minister of militia, seven Y.M.C.A. secretaries were selected, given military rank, and sent with the 1st contingent to Salisbury Plain, where their efforts did something to relieve the exceedingly arduous conditions which prevailed during the winter of 1914-15. When the Canadian troops moved on to France, difficulty was experienced in obtaining permission for the Y.M.C.A. men to accompany them. They were virtually smuggled in on the roll of different battalions, and they existed practically on sufferance. They had to use their own personal money or what money they themselves could obtain, purchasing supplies and helping to cater for the troops. This method continued for about a year.

It was when the Canadians moved from the Ypres salient to the Somme, in the late summer of 1916, that the Y.M.C.A. authorities saw the beginning of their full opportunity. Here the troops, Imperial and Dominion alike, living in a sea of mud, found it almost impossible to obtain adequate canteen supplies. The troops were short of cigarettes and short of sweetstuffs, the two great items that the soldier craved for when at the front. Y.M.C.A. dug-outs and shelters right up in the forward area were open day and night. It was an ordinary thing to find a queue of 100 men waiting outside to be served, and the few officers and their staff were taxed to the limit, scarcely having time to sleep or eat. The work here was by no means limited to Canadian troops. Soon the problem of obtaining

supplies arose. How could it be possible to secure the necessary canteen stuffs in Britain or France? It was soon found that with the growing food shortage it could not be done, and so an arrangement was made with the shipping authorities to permit the importation from Canada each month of 200 tons—6,500 cases—of sweetmeats, candies, fine preserves, and other luxuries wanted by the army. It was not long before it was known that the Canadian Y.M.C.A. huts throughout France had good things on sale that could be secured nowhere else. Under an arrangement made with the military authorities the Y.M.C.A. paid five per cent of the gross receipts to the units in France, to be used for the benefit of the soldiers.

On the Somme, the Canadians had 42 centres. During the winter these were increased to 50, and the number continued to grow. The majority of these were within range of the German guns, and 10 to 15 were right within the trench area. The Y.M.C.A. men were found working amid the ruins of Ypres, and away up in dug-outs beyond that city, sharing the life and the dangers. At battle after battle the Y.M.C.A. officers worked right in the battle area. At Vimy the officer with the 4th division had three places within 500 yards of the front line. The men with all the divisions followed up the advance on April 9, carrying up their supplies and comforts by night to fresh centres.

Sometimes the centre would be the ruins of a house, sometimes a hole in the ground, and sometimes two or three bits of corrugated iron put up to make a little cover. In the severe fighting around Lens the Y.M.C.A. carried on its work in such heavily shelled areas as the villages of Calonne, Liévin and St. Pierre. When the Canadian troops moved up from Lens to Passchendaele they found that the Y.M.C.A. had gone before and had opened depots en route, ready day and night to serve the passing troops. During the battle of Passchendaele, in the long and dangerous route between Ypres and the front, a route under continuous bombardment day and night from German artillery and German aircraft, the Y.M.C.A. had depots at regular intervals, providing cocoa, biscuits and other refreshments for passing troops, for wounded, and for the stretcher-bearers; 11 places were opened up in front of Ypres itself, a number later increased to 18, every one being run day and night. In the fighting at Lens one officer and four of the staff were gassed, three were killed, and 12 wounded.

In January, 1917, the Canadians made a fresh departure. Up to this time it had been the rule to charge 1d. for a large cup of coffee or tea, but it was now determined to give free tea to any soldier at any time at all their places in France. In a few months this service grew so that the cost of teas was over £1,000 a month. In the fighting at Lens in 30 days, free tea to the value of over £3,600, in addition to biscuits, chocolates and cigarettes, was given to the fighting men. At Passchendaele in five weeks the amount distributed cost £8,000. The work was planned to cover thoroughly all men going to and coming from the trenches.

In the autumn of 1917, 39 fresh huts, each 100 feet long, were erected in France. There were nine free cinemas, each giving two shows nightly. The Y.M.C.A. reckoned to provide 100 entertainments weekly for the Canadian fighting corps. In practically all of these entertainments the performers were the troops themselves. A big hut was set aside for training concert and theatrical parties. A musical and theatrical expert was placed in charge. Parties of picked men would come down from each unit and would be put through a quick course of training as musicians, singers, or as players. Scenery and make-up would be provided for them, and these men would produce plays or give concerts. They would give their shows in camps and towns behind the Canadian fighting front to the troops resting there, often amid the thunder of the guns. From the first the Y.M.C.A. officers were the organizers of athletics in the rest camps, some of them being noted athletes. They not only organized the men, but obtained supplies on a wholesale scale. The amount set apart for athletic supplies for the Canadian troops in 1918 was £20,000, and the goods provided on loan for the troops included 500 complete baseball sets, 12,000 baseballs, 6,000 indoor baseballs, 3,000 bats, 60 complete sets of lacrosse, 55 cricket sets, and 15,000 sets of sporting knickers, shirts and shoes.

Gradually the need of educational work among the men became evident. Libraries containing stocks of books were established at every possible place, and were lent on a simple system. Each soldier paid a franc deposit when he borrowed a book, and was reimbursed when the book was returned. He could, if he wished, keep the book. As the demand for more serious literature grew, educational libraries were placed in every

centre. A number of educational classes were established in England, which were soon attended by thousands of men. Out of these educational classes grew a still wider scheme. Many of the young soldiers had come fresh from the universities, and had not been able to take their degrees. Dr. Tory, head of the university of Alberta, was called in, and he framed a big scheme for a khaki university.

The Australian Y.M.C.A. had worked in the army training camps for some time before the outbreak of war, and when the first troops were raised for service overseas it was taken as a matter of course that this work should be continued in Australia itself. But it was considered impossible for Y.M.C.A. officers to accompany the troops to the front, and permission was not obtained until Mr. Wheeler, the secretary of the Adelaide branch and one of the foremost Australian workers, went to Melbourne, interviewed the minister of defence, and secured consent to the dispatch of five secretaries with the army going to Europe. From these five men the Australian work grew in a little over three years to a staff of 140 abroad, of whom 42 were in France. The Australian people raised over £600,000 for it. Thus in the summer of 1917 an appeal was made to New South Wales for £50,000, and a special collection day, "Red Triangle Day," as it was called, was fixed. The sum raised was £182,000.

The Australians were unconventional. They did not believe in being tied down by precedent. They were going to try whatever was likely to benefit the men, and they did so. The theatre in Aldwych, the most prominent part of the Australian work in London, has been already referred to, and is worthy of further description. The Australian leaders felt that it was necessary to have a big place on fresh lines, something that would be an attractive feature for all troops coming to London. Accordingly, the Aldwych Theatre, a very short distance from the Australian government headquarters in London, was secured and carried on as a continuous attraction for the troops at a total cost of about £15,000 a year. Part of the place was made into a restaurant. One section of the foyer was specially set aside for wounded and convalescent troops, and here day after day the Red Cross workers brought wounded men. A hairdressing saloon was opened to save men from unnecessary expense.

The Australian troops were encouraged to go to the Aldwych Theatre when they reached London, to deposit their money there, and to draw it out as they wanted it, rather than wander about with large sums in their pockets, which might be lost in a very brief spell of folly or misfortune. It was an ordinary thing for the Aldwych authorities to hold in their safe hundreds of pounds for men on leave from the front, money which the men had returned to them, usually at £1 a day, to cover their expenses and spendings in town. But the main feature of the Aldwych Theatre was the continuous performance, which started at 3 p.m. each afternoon, and kept on until late in the evening. These performances were free to every soldier in uniform, Australian or otherwise. The theatre had its own orchestra, and for an hour each evening there was a cinematograph performance. Leading actors, music-hall performers, and concert groups of all kinds volunteered their services.

The work in England and in France included the usual features of huts and entertainments. A great deal was done in the way of distributing free drinks and supplies. From January to June, 1917, £15,000 was spent in this free distribution. In the fighting at Passchendaele there was a great demand for some special food supplies for the Australians before they went "over the top." It seemed impossible to obtain them, but the Y.M.C.A. stepped in and arranged to serve out a four-ounce block of chocolate to every soldier before he set out. This little enterprise cost £1,100.

The libraries of the Y.M.C.A. were specially appreciated by the Australian troops. Naturally, the great demand was for fiction, and authors like O. Henry, Rex Beach and Jack London were in chief request. But these were not the only favourites. One author who rivalled the most popular novelist was an American, H. E. Fosdick, who in book after book, such as "The Challenge of the Present Crisis," restated the great moral issues of the war then raging.

The liberal support given by the people of Australia to the Y.M.C.A. movement for the troops was mainly due to the letters received from the soldiers themselves, telling of what had been done. One party which proved a great success, not only in raising funds for the Y.M.C.A. but also in bringing recruits for the army, originated in a very simple way. When the first troops returned home from Gallipoli, and were waiting about in

Adelaide and other capitals, with nothing much to do, the Adelaide Y.M C.A. arranged a recreation house for them on Henley beach The men were taken down there day after day in chars-à-bancs, entertained, and given something to occupy them. This rest-house grew into a permanent club-house, named after Lady Galway, wife of the governor, and herself a prominent leader in the work. The work of the club-house was so good that the military authorities requested that convalescent soldiers might go there. One group of returned soldiers, appreciating what had been done for them, asked if they could do nothing in return. They formed a concert-party, and set out to raise £1,000 to build an annexe to the club-house. They went all over Australia, raising money, and bringing out fresh recruits for the army.

The New Zealand Y.M.C.A. earned a reputation for daring and initiative in the war equal to that of the New Zealand division ; higher praise it is impossible to give. The association was fortunate in its workers and in its methods. Its agents on the fighting fronts were young men, and most of them very young men. They were backed by the people of New Zealand, not only with sympathy but with funds in the most ample measure. The New Zealanders were thus able in their work in Egypt, in England, and on the western front to make provision on a very generous scale. In the 10 centres in England the houses taken were good buildings in good quarters of the towns, and the huts were large and very comfortably equipped. In some of these places New Zealand ladies themselves organized cooking and waiting staffs, and cooked and prepared all the food sold for the troops. Thus at Hornchurch, where a large Y.M.C.A. hut was established in the grounds of the convalescent camp, the convalescent soldiers were provided by their own womenfolk with cakes and comforts which the rich men at that time could not command in the best West London restaurant.

In France the New Zealanders earned a reputation, even among their keen friendly rivals, of pushing up their buildings to the foremost point possible at the front. They put up their huts and ran them in places where the rest of the community were content to live in cellars. More than one of these huts were blown to bits, and more than one of the New Zealand Y.M.C.A. men badly hit by shells. Still they kept on. At the end of 1917 they took the most daring step of all. A New

Zealand division was then settled around one of the most devastated ruins on the western front. It was a place constantly shelled by the enemy and regularly bombed by aircraft, which sometimes rained down hundreds of bombs in a night. The New Zealanders erected a 100-feet hut, as a recreation centre there, which had months of successful life.

In London the New Zealanders made their headquarters at what was in many ways the leading Y.M.C.A. hut in the metropolis, the Shakespeare hut in Gower-street. This hut was built by the British Y.M.C.A. on the site taken by the Shakespeare memorial committee and tercentenary committee to erect a Shakespeare Memorial Theatre. The plan of building the theatre had to be postponed until after the war, but the committee lent the site to the Y.M.C.A. and headed the movement for building the hut. A very extensive range of premises was constructed, exceedingly picturesque from without and very comfortable from within. In addition to a number of entertainment and living-rooms, billiard hall, dining-rooms, quiet writing-rooms and the like, there was sleeping accommodation for several hundred men.

The New Zealanders raised part of the funds for construction of the whole, and made it their headquarters. The New Zealand army had its chief offices just by, and Bloomsbury swarmed with New Zealanders. The British council, feeling that it would be a good thing to have a Dominion centre for troops in London, handed over the Shakespeare hut to the New Zealanders as they did the Aldwych hut to the Australians. The entertainments were under the direction of Lady Forbes Robertson, and leading players of all classes—Miss Ellen Terry, Sir George Alexander, and popular music-hall artistes—came to entertain the men.

The organized provision of concerts and entertainments for the men at the front, an effort widely appreciated by the whole army, started in a very small way. In February, 1915, it was suggested by the ladies' committee of the Y.M.C.A. that the soldiers in rest camps might welcome the diversion of concerts. It was noticed that men at the front were writing home asking for children's mouth-organs, and that gramophones were much in demand. Why not organize a concert-party and give them good music? Miss Lena Ashwell, the well-known actress-manager, was behind the new scheme. The Y.M.C.A. took up

the idea. Permission was secured from the authorities. Some apparently great difficulties were cleared away, and in that same month the first party went over to France. The whole thing was an experiment ; no one was quite sure if the troops wanted such entertainment or not, and it was impossible to be certain of the type of entertainment they would prefer.

The first item on the programme of the first concert laid all doubts to rest. From beginning to end the concert-party received a most cordial welcome. The only difficulty was that the performers could not sing enough or appear often enough to satisfy the demands. A second party set out in the next month. From that point the work grew, until the Lena Ashwell concert parties became a recognized part of life at the different bases in France. The parties usually consisted of six performers. Their journeys were anything but holiday times. There would usually be a hospital concert each afternoon, and two camp concerts in the evening. Often there were long journeys in the intervals. It was no uncommon thing for the concert-party in France to go 50 miles out and 50 miles back in a day, driving in an open car in winter time. In 15 months over 2,000 concerts had been given, and from France and Flanders the parties went still farther—to the Mediterranean and to the Near East. This number was soon doubled.

A still further advance was made when the authorities, yielding to repeated demands, permitted the concert-parties to go up the line right under the fire of the guns. Here, in barns and amid ruins, in places where at night-time no light could be shown lest it drew the enemy fire, the entertainments went on. The performers carried gas-helmets, as did their audiences. In an account of these performances Miss Lena Ashwell wrote:

> Very early in their travels the peaceful concert-party found themselves in a little village which was bombed with lyddite by German aircraft for 23 hours. However, not German Taubes nor artillery actions interfered with the success of the concerts. The British soldier out there can enjoy a 'cello solo or a song while shells are whistling overhead, and our own artillery are replying in an impromptu accompaniment. And it is only fair to recall that the nerves of the performers seem to have been as equal to the occasion as those of their more experienced audience. Only at the first terrific unexpected crash were the performers visibly startled—to the joy of the noise-hardened audience. One concert was given among the guns during an artillery action, and in the words of one of the

artistes: "It was a weird experience listening to lovely music to the sound of the cannon." At any other concert the experience would surely have been inverted; and any other audience would have been more likely to be listening to the cannon than to the sound of the music; but there the men's brains are weary of the roar of the guns and the scream of the shells, and that is why the concert-parties are such an immense boon.

The campaign of the Red Triangle was followed in due course by the activities of the Blue Triangle, the symbol of the Young Women's Christian Association. When women began to take a more prominent part in the war, first in munition-making, and then at the bases in France, at all kinds of work—as transport drivers, telegraphists, telephonists, clerks, book-keepers, and the like—it became evident that special provision must be made for their comfort also. Something was done by the existing agencies, but the Y.W.C.A. was felt to be the organization to specialize for the young women. Between 1915 and the beginning of 1918 the Y.W.C.A. opened over 200 huts, canteens, and hostels in the munition areas for munition workers, and in other areas for government clerks and workers. In many cases these hostels were opened at the request and with the assistance of the firms employing the people. These canteens were feeding, roughly, 130,000 girls a week. Several hostels were opened near large military hospitals for the relatives of wounded and dying men. Clubs for nurses were started at Basra and Bombay. One section of the association dealt with the girls employed on agricultural work in England, providing them with accommodation and food.

When the Women's Army Auxiliary Corps was established, the commander-in-chief of that body asked the Y.W.C.A. to do for the women in khaki what the Y.M.C.A. had done for the men. Over 12 centres, with huts and clubs, were started in France for them, under the joint auspices of the Y.M.C.A. and the Y.W.C.A., the two triangles, red and blue, being displayed side by side, and many more in English camps. The problem of aiding the girl in khaki was one of very considerable complexity. The women's corps included large numbers of the very pick of the womanhood of the country. But they were taken, one and all, right out of their usual surroundings, away from the usual influences of their lives, and found themselves entering on a new life altogether. In the early days extreme independence was rather encouraged than discouraged among

IRISH GUARDS AT THE MONS GATE OF MAUBEUGE, NOVEMBER 9, 1918

Imperial War Museum

JOURNEY'S END. The Belgian town, Mons, where the British troops first saw action in 1914 was also the farthest advanced point occupied by them in the pursuit of 1918 when the armistice came into force. On November 11th the Canadian division reached Mons, and an enveloping movement, followed by an attack from two sides, ensured its fall. On the following morning they entered it behind the pipes of the Canadian Scottish.

the khaki girls. Such a time of transition had its obvious dangers, and the work of the Y.W.C.A. in the camps, both in France and in the United Kingdom, was exceedingly useful at a time when it was most necessary. The extent of the need for this work in England alone can be judged by the fact that by the end of 1917 there were already 100 camps to which women were going, most of the largest lying isolated far away from towns and villages on high stretches of open country. In the Aldershot Command alone it was planned to employ approximately 10,000 women and girls.

The Salvation Army had, before the war, undertaken a great deal of special work for the troops. Early in 1915 establishments were opened in France, the first a hut at Rouen, and the second a house at Boulogne. These establishments grew, until by early in 1918 there was a chain of them from Dunkirk to Havre. In some centres the agencies were of the most varied kind. Thus, at Havre, in addition to a number of huts for the British and Imperial troops, there were several hotels and restaurants in the city where British soldiers passing through were well catered for.

The Salvation Army huts and hostels laid themselves out for general social work. Where it was permitted to sell food to the troops, practical women officers set themselves to cater for the lads in real homelike style. Here the Salvation Army undoubtedly reaped considerable advantage from the fact that many of its workers were drawn from the same class from which the majority of the troops had come. They worked among them, not as fine ladies, but as their own folk, who could mother them as their own mothers would. Some of these women workers, living in base camps frequently exposed to enemy aeroplane attacks, earned a wide reputation among the British army.

Two branches of the Salvation Army work require special mention. The first of these was the mission of mercy undertaken by Miss Mary Booth and a group of co-workers. Miss Booth started to visit the wounded in the hospitals around Wimereux. She found many men there anxious and wanting things done; some of them could obtain no news of their wives and families, and some were troubled in soul. And so the work began. Associated with Miss Booth were some other ladies who visited hospitals all along the base. Notices were issued in Britain stating that the Salvation Army would attempt to obtain

information for people seeking news of their men-folk at the front. With the cooperation and hearty sympathy of the hospital authorities, doctors, and nursing sisters alike, the work rapidly grew. Miss Booth's stay of a few days lengthened to a stay of years. At her headquarters at Wimereux she daily received large numbers of letters from people at home asking for news about their wounded or their dead.

The second branch of the Salvation Army work calling for special mention is the ambulance corps. Almost immediately after the real fighting started around Mons it became apparent that the old British ambulance system was hopelessly out of date. Organizations of all kinds started to supply with the utmost speed motor-ambulances for the wounded. The Salvation Army sent a group of cars out under three officers, Messrs. Aspinall, Taylor and Pentecost. At first these three officers worked as stretcher-bearers in shifts of from 10 to 20 hours, carrying men on their backs up gangways set at 45°, loading ships, unloading trains, and the like. Then, after three weeks at the base, two of them moved on to the line. Here a year was spent with the 7th and 8th divisions, after which the Salvation Army cars were moved down to Boulogne for base work.

In all, up to early in 1918, the Salvation Army sent over 25 cars and about 50 drivers to France. All of these were "Class A" men, taken from general service. Their work received the warmest appreciation from the British Red Cross. Time after time Major Paget, the commissioner at Boulogne, emphasized in the strongest possible way the remarkably good influence of the Salvation Army drivers on their colleagues, their high morale, and their admirable discipline. Adjutant Taylor, who subsequently took charge of the ambulance section, did a great deal of social work for the Red Cross drivers in the Boulogne base. Attached to his section was one of the finest brass bands in France; there were 24 instrumentalists, 12 of whom had been bandmasters or musical leaders. At Christmas, 1917, this band played carols to 20,000 wounded—a record unequalled. The appreciation of the British Red Cross was shown by its urgent demand that the Salvation Army should increase its ambulance work. In response to the demand, a new Salvation Army motor-ambulance unit with 20 drivers was created.

Next in the extent of its operations to the Y.M.C.A. came the Church Army, which by the second year of the war was

spending £240,000 a year on enterprises for the soldier, and a year later had 800 huts, tents, and centres in operation. This society was established in 1885 by the Rev. (afterwards Prebendary) Wilson Carlile, with the primary idea of having a movement inside the Church of England on somewhat the same lines as the Salvation Army, using military organization and titles for evangelistic work. It had grown very considerably up to the time of the outbreak of war, and had established a number of social and relief agencies among the poor. When the war began it concentrated its efforts in the new direction. Tents and huts were established in military centres at home. These were much appreciated not only by officers and men, but by the highest authorities in the army, affording as they did places of rest and recreation.

One special feature of these tents and huts was the partitioning off of a small space in each for prayer and devotion. Thanks to the cordial cooperation of the Anglican chaplains, the Church Army was able to open a number of stations in France and Belgium, not only at the base depots, but very far up in the front lines. Soon there came a friendly rivalry between the Y.M.C.A. and the Church Army as to which should be nearer the front trenches. On the western front about 200 of the Church Army huts or shelters were within range of the enemy's guns, and by the autumn of 1917 no fewer than a dozen of these had been destroyed or damaged by shell fire. The Church Army men on the Somme had their own periodical, "Sometimes: Being the Somme Times and War Zone Chronicle." The work soon extended beyond the western front. There were Church Army workers in Italy and in Malta, with the armies in Egypt, with Allenby's advance in Palestine, in Macedonia and Mesopotamia, in East Africa and in India.

A Church Army hospital was opened by Lady Bagot in August, 1914, at the Observatory, Brussels. It had to retire before the advancing Germans to Ostend. A little later on it was shelled out of Ostend, and from there, after a temporary stay at one other place, it settled at Caen, at the Ecole Première Supérieure on the Bayeux road. The staff hoped when they reached France to be able to nurse British wounded. They found, however, that their services were most needed for French soldiers, particularly since the French medical service was almost wholly overwhelmed at the beginning of the war by

the magnitude of its task. Eventually, the field of fighting moving on to other areas, the necessity of the hospital became less, and it was then resolved to close it and to transfer its staff to Scotland, to Dungavel, the mansion of the duke of Hamilton, which had been opened for wounded and invalid sailors.

When, soon after the outbreak of the war, the conscience of the British public was aroused over the treatment of British wounded prisoners of war and the lack of food in Germany, the Church Army stepped into the breach to help in providing large numbers of parcels for these men. It aided not only the British, but also Russian prisoners in Germany, whose lot was specially bad. Here, again, the work was modified after a time owing to the entire supervision of prisoners of war aid work being formally and officially placed under the British Red Cross. While not sending parcels direct, however, the Church Army continued to help the prisoners on its books through the Red Cross.

In London several hostels were opened. Perhaps the most interesting of these was a large part of the Buckingham Palace Hotel, which was placed at the disposal of the Church Army as a recreation camp and canteen, mainly for troops arriving at Victoria from France. The king granted the use of a portion of the riding school attached to the royal mews, which is practically opposite the hostel, and so it was possible to sleep some 600 soldiers at a time. The former Central Labour home in Marylebone-road was transformed into a soldiers' hostel. There was a third in Artillery-row, Westminster, and a fourth opened in November, 1917, in Great Peter-street, Westminster.

Special agencies were enlisted for munition workers, and particularly for women, including canteens and hostels, where every provision was made for the comfort of both day and night shifts. There were rest huts for women and girls in their off-duty hours. There were homes in garrison towns for the wives of soldiers, and holiday homes for soldiers' wives and children. One exceedingly useful task was undertaken on behalf of the children of soldiers who had lost their wives, or whose wives had abandoned their little ones. The Church Army agreed to take the entire charge of such children until the end of the war. Another special scheme was a farm in Essex where disabled and discharged soldiers were trained in land work.

The most prominent Roman Catholic work was organized by the Catholic Women's League. The initials of the organization

stood for its motto—Charity, Work, Loyalty. This organization had 20 huts in all, four of them being in France. In England there were huts at Ripon, Bramshott, Salisbury, Codford, Richmond (Yorkshire) and several other places. The Codford hut was almost entirely for Australians, and the Bramshott hut for Canadians. In London there was a large hut at Ashley-gardens, with sleeping accommodation for 80 men. In most camps the huts were also used as chapels, where there was no Roman Catholic chapel. The huts were not run in any narrow spirit. They were open to men of all creeds, or of no creed at all, and some of the workers in the huts were not Roman Catholics. The whole spirit in which they were managed was in the highest degree admirable. There was an absence of rules, freedom from restraint, a cordiality and friendship which the soldiers were quick to observe and quick to appreciate.

The hut in London was open day and night, and soldiers could obtain a hot meal there at any hour. A great point was made of having everything as little institutional as possible, and of giving the whole place the same thought and care that would be given in a well-kept private home. The food was nicely cooked and served; the rooms were kept well dusted and fresh and clean ; the lady workers did everything they could for the men —darning their socks and mending their clothes, keeping their treasures for them on their return to the front, and maintaining regular correspondence with them when on active service.

In short, their work was to mother the men ; and mother them they did in the best sense. Attached to the hut was one room looked upon as a kind of club, which was started at the request of many men who had been out to the front but were sent back to London on light duty. They came to the hut for all their meals, and had this one room reserved for them. There were two large dormitories and several cubicles. Each of the cubicles had been furnished by people in memory of brothers, sons, or friends who had fallen in the war. Many men stayed for weeks at a time, and some were there for months. From 1,000 to 1,200 men passed through this hut every day.

One of the first war works of the Catholic Women's League was to place 12,000 Belgian refugees in homes and institutions within 24 hours of their arrival in England. Their chief centres in France were in Boulogne and Calais.

CHAPTER 30

Prisoners of War

THE treatment of prisoners of war was a matter which, particularly towards the end of the war, aroused strong public feeling in all the belligerent countries. It was natural that intense concern should be felt for the men who had fallen into the hands of the enemy, and there were many rumours and circumstantial accounts of acts of neglect and deliberate cruelty. That the Allied prisoners in Germany were subjected to systematic persecution by order of the German government is not true. Conditions varied widely in different camps, and depended chiefly upon the personality and attitude of the commandant. In some instances these officers did their best for the welfare of the men: in others they showed complete indifference to their comfort and health; and in yet others there was systematic persecution and deliberate cruelty.

The treatment of the German prisoners of war in Great Britain had a direct bearing upon that of the British prisoners in Germany. In cases where the conditions laid down in the Hague Convention were violated, the French government took instant reprisals, but the British government was less inclined to do so; with the result that the German treatment of the French prisoners was better than their treatment of the British.

Both in Germany and in the countries of the Allies reports of brutalities in prisoner-of-war camps were given very wide publicity, obviously for propaganda purposes; especially in Germany was the course pursued, and military leaders on many occasions issued statements to the army at the front, purporting to show how badly the captured fared at the hands of the enemy. They aimed, of course, at nerving the German soldiers to fight with determination and bitterness—to die rather than be taken by the Allies. A typical example of the kind of order circulated among them is that signed by Ludendorff in 1918, which ran:

> Capture at the hands of our inhuman foes, in view of their unexampled brutality of treatment, which is now proved beyond question in so large a number of cases, merely means being slowly tortured to death.

That this and similar declarations were believed is shown by the fact that many Germans when captured were in a state of fear as to what would happen to them at the hands of the Allies.

Nevertheless, there was ample proof for Germany that her captured sons were not subjected to any sort of barbaric treatment by the British. This proof was furnished by the unbiased statements made by neutral investigators who were given permission to inspect the various prisoner-of-war establishments in England, and as early as the winter of 1914-1915 there was an occasion of this sort when an American diplomat was given the opportunity of inspecting camps in the United Kingdom. This event is mentioned by Mr. J. W. Gerard, the American ambassador in Berlin, in his book "My Four Years in Germany." He wrote that so many reports came to Germany about the bad treatment in England of German prisoners of war that he arranged to send a member of his staff to Great Britain to investigate and say what really was the case.

This gentleman was the Hon. John B. Jackson, who had been secretary of the embassy in Berlin for 12 years, and therefore was well acquainted with German official life and customs. He also was the personal choice of the German authorities for this particular inquiry. The British government, before whom the matter was brought by Mr. Page, then American ambassador in London, gave permission to Mr. Jackson to inspect all the prison camps in the United Kingdom, a task for which he was peculiarly well qualified, inasmuch as he had conducted similar investigations with regard to the prison camps in Germany a short time before.

Mr. Jackson arrived in England in the course of the winter of 1914-15, and was authorized by the British government to visit all the prison camps in the country without any previous intimation of his coming, and to talk freely with any of the German prisoners without any third party being present. He issued his report in April, 1915, having gone over 13 places and nine ships in which were interned Germans, of whom there were then about 26,000, the great majority being civilians, including ordinary seamen. At that time there were more than 70,000 German subjects or persons of German birth in the United Kingdom, and the number of those interned was under 20,000. Mr. Jackson heard of no woman being interned. He was given every opportunity of seeing everything, and of finding out anything if there

were anything to find out. He conversed with the prisoners, and listened to all they had to tell him; there was no supervision, dictation, or interference of any sort by the British authorities during these talks; Mr. Jackson and the prisoners were left absolutely to themselves, and he got at what really was in their minds. Twice he had luncheon with German officer prisoners, no British officer or soldier being present. Without exception the German officers assured him that they had always been treated as "officers and gentlemen" by the British. He discovered that while in their camps these officers did practically what they pleased, and that there was no direct contact between them and the British officers and soldiers on guard, except when they were outside the wire enclosure.

Speaking of the camps generally, Mr. Jackson noted that the German prisoners did their own police and fatigue work. He observed that at Frith Hill camp, at Frimley, near Aldershot, the prisoners ran their "own little republic under their non-commissioned officers," who were responsible to the British military authorities, and that they had their own police, "even their secret police." At all camps opportunities were given for exercise, which, however, was not obligatory, although prisoners were expected to spend so many hours daily outside their sleeping quarters.

Employment or work apart from what was necessary in the camps had not at that time been provided for any of the interned. Soldiers who had no uniforms were permitted to wear civilian clothes, and when civilians had not the means to buy such things as blankets, shoes, and clothing they got them from the British government. Books published before the war in English and other languages were allowed, as were British newspapers after January, 1915. The prisoners were under the same regulations as in Germany with respect to the receipt and the dispatch of letters; the rules regarding receiving or sending money were the same. The food was practically the ration of the British soldier, and the prisoners thought it satisfactory. The free use of tobacco was permitted, and in most camps visitors were allowed at stated times.

There were no complaints, except from some of the civilians who had been taken from neutral ships or had been arrested in the Colonies, but their complaints were concerned with the manner of their arrest and their treatment before being brought

to the internment camps—not with their treatment in them. As the result of his independent and impartial survey, Mr. Jackson concluded his report with the following statement:

> On the whole, the present treatment seems to be as good as could be expected in the circumstances. The new camps are all better than the old ones, and everywhere there seemed to be an intention to improve on existing conditions. Lack of organization and preparation would account for most of the hardships which prevailed at first. Absolutely nowhere did there seem to be any wish to make the conditions any harder or more disagreeable for the prisoners than was necessary, and I saw no instance, and heard of none, where any prisoners had been subjected either to intentional personal annoyance or undeserved discipline.

Mr. Jackson's report dealt with part of the first year of the war, when Great Britain had to improvise accommodation for prisoners of war while, at the same time, she had to improvise a thousand other things—armies, munitions, and pretty nearly everything else. These were the circumstances to which Mr. Jackson alluded in the foregoing quotation. His report was by no means the only one issued by representatives of the American government. For instance, in a White Paper which was presented to Parliament in September, 1916, there were published reports by officials of the United States embassy in London giving particulars of visits which they had paid to a considerable number of places of internment.

Among the camps inspected were the large civilian camp at Knockaloe, in the Isle of Man, and the camps at Stobbs, in Scotland; the Alexandra Palace, London; Handforth, in Cheshire; Eastcote, in Northants; Dorchester; Lofthouse, near Wakefield; Oldcastle, in County Meath; and Douglas, in the Isle of Man; as well as many others. All these reports had one feature in common—no complaints; considering their position, the prisoners were uniformly well satisfied. Certainly there was no harshness of any sort in their treatment.

All these American reports were transmitted through the United States embassy in Berlin to the German government, and the tenor of them, if not their very words, must have been known to Hindenburg, as to many other, if not to all, German leaders. In addition to these reports, there were others giving equally independent and impartial accounts of the British treatment of prisoners of war. Thus, as far back as February, 1915,

the International Red Cross in Geneva, by its representatives, Professor Edouard Naville and M. Victor van Berchem, who visited and inspected the various prison camps in Great Britain, reported that out of 10,000 German officers and men who were prisoners in the United Kingdom not one was dissatisfied with his food or treatment.

One of the most striking tributes to the fair treatment of German prisoners by the British was that published early in 1915 by Mr. Steen, a Norwegian, in "Le Temps" of Paris. He had gone through the camp at Holyport, and had found the prisoners cheerful and contented. On leaving he asked a German colonel whether he had any complaint to make, and was told that he had none. This German officer added: "The English are very kind. I tell my people in Germany of their kindness in every letter I write . . . The English seem intent on providing their prisoners with comfortable and healthy accommodation," and speaking of the food, he said it was the same as that for the British soldiers.

Notwithstanding these reports, as has been stated, the German leaders persisted in their misrepresentations of the treatment of German prisoners by the British. In a manifesto issued at the beginning of September, 1918, to the German people, Hindenburg, commenting on propaganda leaflets which had been distributed in Germany by the Allies, and which he maintained "decoyed the fighters at the front," said: "There are still some decent and humane commandants of prisoners' camps in England and France, but these are the exception."

At the beginning of the war Great Britain had no scheme or machinery arranged for dealing with prisoners of war, and indeed the sole guide the military had for their reception and treatment was a royal warrant for the Maintenance of Discipline, dated August 3, 1914, which gave a scale of punishments for refractory men. Its rules and regulations had been in course of preparation and amendment for several years, the nucleus being derived from similar rules and regulations at the time of the South African War. Prisoners of war arriving in the United Kingdom were dealt with by a branch of the department of the adjutant general, later compendiously known as A.G.3, under the War Office. At the start there were no prison camps, no places set apart for internment, and these had to be improvised as was most feasible in the circumstances. Use was made of the ordinary barracks

and camps where possible ; in some cases civilians were temporarily detained in prisons, though they were not put under the usual prison regime. As Great Britain was suddenly called on to make provision for a vastly increased army, it was evident that she would quickly require far larger accommodation for her own soldiers than existed at the time, and that this pressure must have the effect of increasing proportionately the difficulty of arranging adequately for prisoners of war, whether military or civilian. Civilian prisoners were dealt with by both the Home Office and the War Office, the latter having exclusive charge of the military and naval prisoners.

The first German prisoners were received in the Dorchester camp in August, 1914, and this camp became what may be called a permanent camp—that is, a camp for the duration of the war and such longer time as was necessary according to the final settlement at the peace. Other similar permanent prison camps were established during that month at Queen's Ferry and Lancaster, and temporary camps were set up or provided at Horsham, York Castle, Bradford Moor, Olympia (London), Edinburgh, and Fort George. Some of these were merely makeshifts, and were closed before the end of August. In September the number of camps was increased. Describing one of these camps—that at Frith Hill, Frimley—a representative of "The Times," who paid it a visit, spoke of the prisoners as consisting of Uhlans wearing riding-breeches and spiked helmets, infantrymen in uniforms of blue-green, sailors in navy blue, and civilians in the garb in which they had been arrested—one with a white waistcoat which he had been wearing at a wedding party when taken. The prisoners solaced themselves with games and music.

As accommodation for prisoners throughout the country was very scanty, and far beneath what was required, use was made of some ships for their internment. These vessels, nine in number in all when Mr. John B. Jackson inspected them, were mostly large ships, of 4,000 to 5,000 tons, of the type of the Canada, the Ascania, and the Ivernia. In Germany objections were made to the use of these ships for housing prisoners, and in view of the fact that facilities for exercise were limited, there is no doubt that there was justification in the protest. On the other hand, the ships were not intended as permanent camps ; and before the end of June, 1915, the prisoners were removed from these vessels.

In the early days of the conflict the military and naval operations were such that few Germans were taken prisoner, and those camps which existed, therefore, confined mainly civilians who had been sentenced to internment. These, no doubt, felt their imprisonment far more keenly than did the German fighting men.

Considerable developments with respect to prisoners of war took place in 1915. As it was certain that the war would continue for some time, and that the number of these prisoners would materially increase, steps were taken by the War Office to multiply the camps. In February, 1915, a decided move forward was made by the formation of the directorate of prisoners of war as a distinct and separate organization in the department of the adjutant general to the forces, who at that time was Lieutenant General Sir H. C. Sclater. The director was Lieutenant General Sir Herbert E. Belfield, who had been in charge at the War Office of the arrangements for enemy prisoners from the first. Under him, as D.A.A.G., was Captain (Temporary Major) R. N. W. Larking.

The directorate began with a very small staff, which, however, grew as prisoners kept coming in larger numbers. By December 31, 1915, there were interned 12,349 military, 1,147 naval, and 32,272 civilians, the vast majority—practically all—of whom were Germans. At that date the number of camps was 21 in England, two in Scotland, one in Ireland, and one in the Channel Islands. There were also 42 detention barracks—eight for military, six for naval, and 28 for civilian prisoners. These detention barracks were for men found guilty of breaches of discipline in the camps by properly constituted courts, and duly sentenced to shorter or longer terms of imprisonment—real imprisonment—according to the nature of the offence.

During 1915, controversy occurred between the British and German governments as to what was to be done with the captured officers and crews of U-boats. The point to be noted here is that the British government, having stated that such officers and crews could not be regarded as honourable prisoners of war, because of their systematic attacks on unarmed merchant ships, put the men of three captured submarines in the naval detention barracks at Chatham dockyard. In reprisal, Germany imprisoned a corresponding number of British officers. The British government thereupon made it known that the submarine crews were not "ordinary prisoners." These submarine officers and crews

were, in point of fact, not treated with any degree of harshness, but merely separated from other prisoners of war. In June, 1915, the British government decided to abandon the policy of differential treatment for this class of prisoners, who were afterwards sent to the naval prison camps.

During 1916 the number of civilians interned in the United Kingdom slightly decreased, while that of the military and naval prisoners naturally grew considerably, and entailed the provision of more camps. On the last day of that year there were rather more than 31,000 civilians in the camps, as compared with 48,572 military and 1,316 naval prisoners. The camps had increased to 38 in England, and to eight in Scotland, with one in Ireland and one in the Channel Islands, as before; there were two temporary camps in France, but they disappeared before the end of 1917; in all there were 50 of these prison camps. The number of detention barracks was 59—24 for military, 15 for naval, and 20 for civilian prisoners.

Early in 1917 the directorate of prisoners of war, owing to the great increase of its work, and with a view to expediting and simplifying its labours, was divided into three sub-sections. Colonel (Temporary Brigadier General) T. E. O'Leary was appointed deputy director; Brevet Major (Temporary Lieutenant Colonel) Larking became A.A.G., and two D.A.A.G.'s were added, the whole personnel being otherwise much augmented. At the same time, work in connexion with British prisoners of war was separated from that which referred to enemy prisoners in British hands. The same arrangement allocated to one branch all questions of policy concerning prisoners.

About the same time changes were made in the rations of prisoners, because of the shortage of food in Great Britain, both actual and prospective, due largely to the German submarine campaign. Before this, at any rate up to January, 1916, when a reduction was made in the bread ration, the daily food supplied to a prisoner was as follows: Bread, 1 lb. 8 oz., or biscuit, 1 lb.; meat, fresh or frozen, 8 oz., or pressed, 4 oz.; tea, ½ oz., or coffee, 1 oz.; salt, ½ oz.; sugar, 2 oz.; pepper, 1-36th oz.; milk, condensed, 1-20th lb.; fresh vegetables, 8 oz.; and butter or margarine, 1 oz.; 2 oz. of cheese was allowed as an alternative to the 1 oz. of butter or margarine.

On and after February 19, 1917, meat, game, and poultry, articles containing sugar, jam and syrup, and articles containing

flour were no longer permitted to be sold in canteens, or purchased elsewhere by prisoners, whether combatant or civilian, except in the case of officers and such other prisoners as drew no rations—and they were limited in the purchase of meat, sugar and flour to the amounts advocated by the food controller for the civilian population of the country: 2½ lb. meat, ¾ lb. sugar, and 4 lb. bread a week. Also it was announced that parcels sent to prisoners from within the United Kingdom or the Channel Islands after February 25 would not be delivered unless the articles in them were in conformity with the suggestions of the food controller.

By the end of 1917 the number of prisoners of war had risen to upwards of 150,000. Of these, 118,864 were German, and nine were Austrian military prisoners; 1,635 were German naval prisoners, and one Turk was a naval prisoner; while the civilian prisoners comprised 25,120 Germans, 4,065 Austrians, 108 Turks, and 223 others. England, where there were no fewer than 142 camps, became familiar with the sight of them; Scotland had 14, and Ireland one. The number of detention barracks for civilian prisoners had gone down to nine, while that for military prisoners had only increased to 33, and that for naval prisoners had decreased to five. The disciplined and obedient German military or naval prisoner gave, as a rule, very little trouble. He submitted willingly to the orders of the camp captain, and cheerfully did what he was told. When he was employed outside the camps on work, for which to his surprise he was paid good wages, he proved himself a steady and reliable worker.

Besides the increase in the number of prisoners, the chief fact in 1917 concerning them was their employment on work of various kinds outside the camps. The shortage of labour, as well as the shortage of food, made itself felt in the United Kingdom, and it was not unreasonable to call on prisoners of war to work. Within a few months after the war broke out the labour of prisoners had been utilized in Germany, France and Russia. Under the Hague Convention it was permissible to use the labour of all prisoners of war, except officers, according to their capacity. It was laid down that the work must not be excessive, and that it should have no connexion with the operations of the war. There was for a long while a distinct prejudice against employing German prisoners at all, a prejudice that died out slowly, particularly in Scotland and Wales.

In 1916 German prisoners were employed to some extent, but it was 1917 that saw them at work on a fairly large scale. In 1918 all military and naval prisoners were working, except officers, some classes of non-commissioned officers, and the physically unfit. This labour army numbered 70,000 men by the autumn, and included about 2,000 non-commissioned officers, who got a little extra pay. Not a few were employed in building operations, in constructing huts, and in timber cutting. Others made and repaired roads, while others again were engaged in reclaiming waste land. One party of them did good work on the reservoirs at Glendevon, in Scotland.

Later the German prisoners were employed in almost every kind of labour. In the autumn 30,000 of them were harvesters, moving about in gangs as required; then they dug up potatoes and took a hand at threshing. These migratory bands, 10 or more in number, were a great success, under the direction of about 350 agricultural committees, supervised by the ministry of national service. After July, 1918, consequent on the triumphant counter-offensive of Marshal Foch, the number of prisoners went up by leaps and bounds; on October 25 it was well over 250,000; but the new arrivals took some time to settle down, and were not put to work at once. At that date there were 492 camps in England, where the whole country was dotted over with them, 25 in Scotland, and one in the Channel Islands; there were none in Ireland. Some thousands of German sick and wounded prisoners were being treated in 35 hospitals.

In acknowledging the excellent work done by the German prisoners, account had to be taken of the fact that, in common with the population of England and Scotland, they had had their rations again reduced. In June, 1918, the ration was: Daily, bread, 9 oz.; broken biscuit, 4 oz.; meat, beef or horseflesh, on three days a week; bacon (Chinese), 1 3-5th oz., on two days a week; salt-cured, smoked or pickled herrings, 10 oz., on two days a week. Daily, tea, ¼ oz., or coffee, ½ oz.; sugar, 1 oz.; salt, ¾ oz.; potatoes, 20 oz.; other fresh vegetables, 4 oz.; split peas or beans, or rice, 1 oz.; oatmeal, 1 oz.; jam, 1 oz.; cheese, 1 oz.; maize meal, ½ oz.; and pepper 1-100th oz. Weekly, either 8 oz. salt-cured, smoked or pickled herrings and 2 oz. oatmeal, or 4 oz. salt-cured, smoked, or pickled herrings, 2 oz. oatmeal, and 2½ oz. broken biscuit. Such was the ration of the rank and file from that time up to the end of October, 1918,

when jam was stopped, the rest remaining unchanged. In March of that year officers and such other prisoners as drew no rations were limited in the purchase of foodstuffs to 20 oz. of meat, 20 oz. of fish, and 56 oz. of bread a week, with the amount of other necessaries reduced in a similar manner.

Officer prisoners were provided with furnished quarters and were allowed to have German orderlies as servants. They were given half the pay of the corresponding ranks of infantry officers in the British army; in the early days messing was free, but later this was altered so that a sum of 2s. 2d. per day was deducted from each officer's pay allowance. Medical attendance and medicine were gratis, but prisoners were expected to clothe themselves. They could buy wine and other extras.

The rank and file were provided with rations, clothing and medical attendance free, and also received pay for work done apart from the camp work. They were permitted to purchase fruit, tobacco and the like in the canteens at the same prices as those paid by the British soldiers. By the Hague Convention wages earned by prisoners were to be used for improving their position, and the balance handed over to them on their release, but this was conditioned by the exception of "deductions on account of the cost of maintenance." In the United Kingdom employers were charged for the services of prisoners the customary local rates for labour; they paid the full amount to the British authorities, who gave the prisoners the allowance under the royal warrant, and credited the remainder against cost of maintenance. Under the royal warrant which governed these rates this pay varied from ½d. to 2d. an hour, according to the nature of the work. In agricultural work, such as harvesting, prisoners earned about a shilling a day.

Prisoners working outside the camps gave little or no trouble with respect to guarding them. Nor did prisoners in the camps themselves occasion much anxiety to the guards. There were not a few escapes from the camps, but in comparison with the large number of prisoners they were in reality not numerous. In only four cases—one for each of the four years, 1914-18—did prisoners escape from the United Kingdom; all the rest were caught after a longer or shorter period of freedom. As all the ports were closely watched, and the coasts strictly patrolled, it was extremely difficult for a prisoner, if he contrived to get as far as any place on the sea, to get out of the country.

Of the four who succeeded, two, who had seized an open boat at a point on the north-east coast, were believed to have perished in the North Sea. Of the two known to have reached Germany, one of them, Kapitänleutnant Gunther Plueschow, published an account of his escape in a highly interesting book, entitled "The Airman of Tsingtau," a copy of which he sent, with ironic compliments, to General Belfield, the director of prisoners of war, at the War Office. It appeared that he had told the authorities that he would escape.

In his earlier years Plueschow had been in London, and acquired a knowledge of it which served him well afterwards. Trained as an airman at Johannisthal, Berlin, he was sent by the German government to Tsingtau, went through the siege, and, ordered by his commander to leave that town a few hours before its fall, went by aeroplane into China, whence by way of Shanghai and San Francisco he made his way to New York. Passing himself off as a Swiss, he reached Gibraltar, where he was detected, taken to Portsmouth, and put on board the Andania, one of the prison ships, and then dispatched to the camp at Dorchester, but having made good his claim to be treated as an officer he went on to the officers' camp at Holyport, and later was transferred to Donington Hall.

In his book he criticized the management of the Andania, and found fault with the accommodation, but he and another prisoner had a small cabin to themselves, and they made no complaint about the food. Of Dorchester he said that the people always behaved perfectly; "there was not a single contemptuous gesture, and never a word of abuse." He stated that the prisoners were "very contented, the food was good and plentiful, the treatment could not be complained of, and there were plenty of opportunities for games." At Holyport he evidently had a "good time," the only drawback being the lack of liberty:

> A number of good books (he wrote), our string quartet, and a choir, which we had got up ourselves, contributed materially to our social life. We used to rag a good deal, too, and sometimes, when we had had a really good laugh once in a way, we seemed to breathe more freely, and for a short time the dreadful weight of captivity seemed to lift from our shoulders.

Of Donington Hall Plueschow said:

> Donington Hall was supposed to be the model camp for the whole of England. According to the accounts we had been reading for weeks in the English papers it would seem to be a

paradise on earth. Every day you might read columns on the subject, attacking the government for housing the prisoners too luxuriously. As usual, the women were the most violent, and had gone the length of making the compulsory evacuation of Donington Hall a question for the women of England. Even in Parliament the subject was brought forward more than once. It was said the place was furnished like a palace, with card-rooms and several billiard-rooms, that the game in the park was strictly preserved for the prisoners, and that even hunting was arranged for them. None of this was true. Donington Hall was a fine old seventeenth-century castle, certainly, and surrounded by a magnificent park; but the rooms were entirely bare of ornament, and the furnishing the scantiest and most primitive imaginable. Not a trace of billiards or card-room or hunting. But everything was spotlessly clean, and the commandant took admirable care that it should be . . . Life at Donington Hall was almost the same as at Holyport, except that here we had much more opportunity for exercise on account of the park, and that we played games even harder, if possible, as here we had three very good tennis-courts. . . . The commandant did everything he could to alleviate our hard lot and took particular interest in our games.

Such was Plueschow's testimony to the British treatment of German prisoners. He escaped from Donington Hall, got to London, and, disguised as a dock labourer, eventually succeeded, after many adventures and some narrow squeaks, in boarding a Dutch steamer, which conveyed him, stowed away unknown to anybody in one of the ship's boats, to Holland, whence he travelled into Germany.

Each prisoner in British internment camps was permitted to write and send two letters a week, and in the last two years of the war these men wrote and dispatched letters at the rate of about 350,000 each week. Contained in a vast number of these, which were censored, of course, were statements which entirely refuted the many assertions made in Germany of brutality on the part of the British.

So far as it was possible, the prisoners, whether officers or men, were expected to cooperate with the camp commandant in conducting the various camps. Camp captains and camp sergeants were selected, and it was the duty of these men to organize and control the messing arrangements, recreations, amusements, and other phases of the prisoners' life. In the civilian camps the process of self-government developed amazingly; in one of these there were, under a captain and a general committee of control

elected by the prisoners, a canteen committee, a kitchen committee, a worship committee, a bed-room committee, a wages committee, and a relief committee. The relief committee was a feature of most camps; its business was to provide money for those who had none from those who had. Most of the prisoners of all classes devoted much of their time to reading and study, and an education committee was found in every camp. At the outset the British authorities provided the prisoners with the means of recreation, and most camps had a sports committee.

In August, 1914, within a week of the outbreak of the war, a prisoners-of-war information bureau was constituted by the government in compliance with the provisions of the Hague Convention. It took up its quarters at Wellington Street, Strand, London—in the near neighbourhood of Covent Garden. Under the direction of Sir Paul Harvey, an expert staff was recruited from other departments of the civil service. In 1915 Sir J. D. Rees succeeded Sir Paul Harvey.

Naturally, as the number of the prisoners increased, the work of the bureau became very heavy, and in 1918 it had a staff of upwards of 300. As its first business the bureau kept a complete register of all alien enemies, combatant and civilian, who were interned in any part of the British empire. The officers in command of prison camps were required to furnish a list of all new prisoners received by them as soon as possible after their arrival, the preliminary list being supplemented later by full individual returns. This register, therefore, contained all relevant particulars of every soldier captured in the field, every sailor taken at sea, and every civilian, man or woman, passing the gates of the camps, not only of German, but of Austrian, Bulgarian and Turkish nationality. This record enabled the British government to supply the enemy governments with full lists of their prisoner nationals. The bureau further sent copies of the lists to the German, Austrian and Bulgarian Red Cross Societies, and to the Ottoman Red Crescent Society.

In the second place the bureau fulfilled a special function with respect to sick and wounded prisoners. The officers commanding the camps part of which were used as hospitals, or which were hospital camps pure and simple, forwarded to the bureau a return of all admissions to and discharges from hospital, and this information was dispatched regularly to the enemy governments in order that the relatives and friends of these sick or wounded

prisoners might know their state of health. With regard to the "enemy dead" the bureau received from general headquarters as complete returns as were possible, particulars frequently being accompanied by the actual identification discs, and any personal belongings which had been found on the bodies.

Information with respect to these men was forwarded in due course to the governments by the bureau, which besides was at pains to make sure of its statements, verifying them, where that could be done, by interrogating prisoners of war who were in a position to give testimony. It is also to be noted that the bureau did good work by interrogating prisoners concerning the fate of those whose names did not appear in the official lists of dead prepared either in Great Britain or Germany. Prisoners were interviewed in the camps, and where they were able to furnish the necessary particulars as to their fallen comrades, death certificates were issued by the German government, on the strength of their written statements, to the next of kin. When these relatives made inquiries the bureau gave them any further information it possessed, and stated, wherever it was possible, the burial-place of those who had been killed or had died of wounds.

Answering inquiries of all kinds formed a very large part of the service rendered by the bureau. Inquiries often amounted to as many as 400 a day from Germany alone; they came by telegrams, by letters, and from people in person. The bureau took charge of the personal belongings of prisoners which came into its possession. It forwarded the personal effects of the dead to relatives through diplomatic channels; in all cases, where the thing could be done, it traced the owners of other articles put in its custody, and, with the exception of arms and military papers, sent them to the proper quarters. It transmitted to prisoners all letters and parcels which came for them.

With respect to correspondence, relatives and friends were advised to address letters, parcels and money-orders direct to the camps, but where the address was unknown, or where letters were returned as undelivered, it undertook the duty of a post office. Under the Hague Convention prisoners were permitted to receive and transmit letters and parcels free of charge, and this provision was scrupulously observed by the British authorities. The British did everything that was prescribed by that convention—and a good deal more—through this bureau.

As was the case in Great Britain, the first to be taken into captivity in Germany at the beginning of war were alien civilians; but whereas the primary reason for the British action against German civilians was that they were suspected of espionage, the internment of the British in Germany was brought about by the public outcry and bitter feelings expressed of England's entry into the conflict. With the whole country in a state of turmoil, and its energies concentrated on the momentous initial steps of the war, it is not surprising that these British civilians suffered considerably at the hands of their captors; feelings ran high, and the organization of the establishment of proper internment camps was regarded as a minor consideration by the German authorities.

The British internees found themselves, therefore, in a miserable plight when they were sent to the improvised camp at Ruhleben, the first and one of the most notorious places of confinement in Germany. Situated near Berlin, the site of this camp was a racecourse, and the prisoners were quartered in the stables, lofts, and other buildings. For the first arrivals there were no beds, and the ablution and sanitary arrangements were of the crudest. After some time had elapsed several improvements were introduced, although these were never of a nature to afford any degree of real comfort to the inhabitants. Ruhleben ultimately became the headquarters camp for practically all British civilian prisoners, of whom there were some 6,000. No proper provision was made there for treating the sick, and if it had not been for the perseverance and energy of a Mr. Lambert the sufferings of the ailing in Ruhleben would have been much worse than they were. As it was, Mr. Lambert, who was himself an internee, organized a form of hospital at Schonungs Barracke, and it was to this place that the sick and ailing were sent. Mr. Lambert's arrangements were amplified later by a sanatorium outside the camp, which was run by a Dr. Weiler. But treatment here was not free, and the patients had to pay fees.

By the end of November, 1914, the German authorities had interned practically every British person who was of military age. Meanwhile, the operations in France were taking shape, and the Germans were taking their toll of British prisoners, who quickly found their position worse than that of their civilian brothers. The military camps, which had been hastily formed, were generally inadequate in every way; the accommodation

was far too limited for the number of prisoners installed, and the food and living arrangements were of the poorest. As time went on these matters were rectified at some camps, but at others the conditions remained the same and even became more acute. Ugly reports reached England of the lot of the British captured, and there was much uneasiness and protest.

Subsequent events revealed that some of these reports of inhuman treatment of British prisoners were not correct, that they were exaggerated, if not wholly false. But for the most part they were, unfortunately, true. It was natural that the British community felt extreme bitterness over this matter of the hardships of British prisoners of war ; it roused an aggressiveness probably unequalled by that resulting from any other action, legitimate or otherwise, for which Germany was responsible throughout the period 1914-18. Nevertheless, in fairness it must be said that the handling of prisoners on a huge scale presented a great problem, bringing hardships to the captives which the captors with the best of intentions could not avoid. At the beginning of the war the number of prisoners interned in England was comparatively small. Even so, the lack of preparation for their reception made matters difficult, and there is no doubt that hardships resulted before adequate plans were made which rectified the trouble. In Germany in the same period similar difficulties arose, but they were more obvious owing to the larger number of prisoners taken. Overcrowding, lack of regular food and medical care, were the principal faults.

The main camps established for non-commissioned officers and men consisted of groups of huts allotted for sleeping purposes, with others as cook-houses, latrines, and so forth, the whole surrounded by double, barbed-wire fences. Discipline was maintained by a camp commandant, his staff and guards, and all prisoners were ruled by the German military law and treated as on active service. Captured officers were imprisoned in a variety of buildings, some had quarters in disused factories, some in fortresses, and others lived in huts and hotels. As these places of confinement differed in location, size, and character, so did the treatment which their inhabitants received ; frequently the quarters were wretchedly crude with a lack of ordinary furniture and other requisites, and in all cases were the British required to supply, at their own expense, cutlery fuel and light. The German government paid captive officers in the same way that

the British government paid German officer prisoners. Recreation both for officers and men was handled in much the same way as it was done in Britain ; football and other games were sometimes permitted, and at some camps the prisoners went for walks in the surrounding neighbourhood under escort.

For the first six months of the war British prisoners in Germany remained in captivity with little or no occupation. This in the main was due to the attitude of the men who, when invited to volunteer for work outside, refused to do so. Later on, when pressure was brought to bear, aided by the monotony of enforced idleness, the prisoners were utilized by their captors in several ways. Large working camps were built, and British soldiers were set to work in quarries, mines, and at timber-felling, and the like. Others worked on farms and were employed in many industries.

This new development gave rise to further troubles in the difficult problem of prisoners of war. Added to the matters of bad accommodation, bad food, and ill-treatment, was the question of the violation of the Hague Convention in employing prisoners on work directly connected with the operations of war. Moreover, there were sundry reports of brutal treatment of the captives while engaged on various tasks which made them little better than slaves. That some prisoners were put to work on munitions there was little room for doubt, and many were employed on work of a particularly revolting character ; they had to work under deplorable conditions in slaughter-houses, on refuse dumps, and in scavenging the streets. Often the men were compelled to work long hours, and where their accommodation was situated far from the working sites they had to march several miles to and fro each day.

So frequently did information of individual acts of brutality to prisoners by the Germans come to hand that the British government deemed it necessary to appoint a committee to investigate these stories, weigh the evidence and report thereon. For this purpose a committee, presided over by Lord Justice Younger, was appointed in 1915. Their work went on throughout the period of hostilities, and in all nearly 4,000 British soldiers, including hundreds of officers, who had either escaped or been repatriated, gave evidence before this committee. Information was also secured from prisoners who had escaped to neutral countries and had there been interned. The examination

of these men was done with meticulous care ; the investigations being carried out by persons well versed in the task of sifting details, and there is no doubt that the resulting reports, which were placed before both Houses of Parliament, presented the facts without bias or prejudice.

How extensive was the work of the investigating committee may be judged by the fact that details were secured of the conditions obtaining at 929 prisoner-of-war camps in Germany. The revelations of the witnesses were sometimes unimportant, sometimes startling, but taken as a whole they showed that the combination of the harsh German military law which was enforced in all prison and internment camps, and the shortage of food and other supplies, made the lives of the captured extremely hard and often almost intolerable.

On the whole, the most severe conditions for prisoners were met where they were employed in coal and salt mines, and in connexion with these many strong protests were sent to the German government. Ostensibly work in the mines was inflicted as a punishment, and the nature of the work consisted in loading the stuff, which had been cut from the seams, on to trucks and removing them for transport to the surface. The task was a heavy one, even for a man in full vigour ; for prisoners weakened by privations it was often impossible. Yet British soldier captives were forced to do this work in eight-hour and sometimes 24-hour shifts, and, if they failed to complete the work allotted, they were made to remain in the mines for a further shift.

The prisoners from the mining camps at such places as Münster, Hameln, Friedrichsfeld, Soltan, Langensalza, and Chemnitz were hired out by the German government to private firms, with a military guard to maintain discipline. This practice led to much trouble because the N.C.O. in charge and his subordinates were very often bribed by the contracting firm to extract the utmost from the luckless prisoners. Consequently the latter were driven to work in a most barbarous fashion. To the prisoners' miseries, brought about by poor food, lack of clothes, and ill-treatment, was added at times the scourge of typhus and other diseases.

Such was the case at the ill-famed camp of Wittenberg. In this camp, which was built on a flat, sandy plain and covered an area of 10½ acres, there were as many as 16,000 captives. Typhus attacked them, and, the men being herded together, it ran like wild-fire among them. Little or nothing was done to

curb the disease until, after a delay of two months, six captured British medical officers were sent to the camp. These officers were: Major Fry, Major Priestley, Captain Sutcliffe, Captain Field, Captain Vidal, and Captain Lauder. The conditions they found at the camp were appalling.

The outbreak started in the winter of 1914-15 when intense cold was experienced at the camp. The living quarters of the men consisted of wooden huts and bungalows, but the heating arrangements of these were hopelessly inadequate. The stoves were so small that only by their being constantly stoked and filled with coal to their maximum capacity was it possible to keep the rooms at a comfortable temperature. Moreover, there was a great shortage of fuel. These facts are given in a British official report which also reveals that the men were very ill-clad, some of them even using blankets as clothing. Major Priestley stated to an investigating committee, who interviewed him on his subsequent repatriation, that he found the prisoners "gaunt, of a peculiar grey pallor, and verminous . . ."

The food ordinarily issued at Wittenberg by the Germans consisted mostly of a 1 kilog. loaf of bread for 10 men, a thin soup made of potato flour, horsebeans, and a minimum of meat. There was a great scarcity of hot water. In the bungalows which housed the prisoners there was, as a rule, but one mattress for three men, and typhus patients and those not infected were herded together. Owing to lack of soap, washing of patients was out of the question, and there was no hospital clothing. According to the investigating committee's report the diet issued to each suffering prisoner comprised half a *petit pain* and half a cup of milk each day. Some soup was also served, but as it was in a tub without a cover it was full of dust and dirt.

After some time Major Priestley and Captain Vidal were sent to do duty at two hospitals outside the camp, where conditions were more satisfactory, but later they returned to Wittenberg, to find that Major Fry and Captain Sutcliffe were dying of typhus. Captain Field was also attacked, and he, too, succumbed, so that of the four colleagues who had remained in the stricken camp only one—Captain Lauder—survived. The last-named officer had at one period also become infected, but he stuck to his work, became convalescent, and bravely carried on.

Before the outbreak, the medical and surgical arrangements had been under the charge of a German medical officer, Dr.

Aschenbach, but he precipitately left the camp when the outbreak occurred. About this man the report says:

> On one occasion only during the whole course of the epidemic did Dr. Aschenbach enter the hospital, or even the camp. His visit took place about four weeks after Major Priestley's arrival, and after some kind of order had been evolved. He came attired in a complete suit of protective clothing, including a mask and rubber gloves. His inspection was brief and rapid. For his services in combating the epidemic, Dr. Aschenbach, the committee understand, has been awarded the iron cross.

The committee stated further that:

> . . . some of the German guards outside the camp were infected by prisoners to whom, contrary to orders, they persisted in selling things. These men were placed by the Germans in a hospital outside the camp, and one of the German medical staff, an Alsatian as it happened, was sent to attend them. At a later stage in the outbreak this young man came to the hospital, but simply to take bacteriological specimens for research work at Magdeburg. He helped in no way. With these exceptions no visit was paid to the camp during the whole outbreak by any member of the German medical service. The dead were buried in a cemetery formed out of a part of the camp. The Germans sent in a certain number of coffins every day, into which the bodies of the dead were put and carried out by their comrades through a gate in the barbed-wire. There was not sufficient room for burial of so many, and the coffins were piled one upon another . . . .

It was not until April, 1915, that bedding, clothing, and medical supplies were obtained in any quantity, and when the warm weather came the cases, fortunately, began to decrease in number, although months elapsed before the fever was stamped out. As the official report says:

> It was to Major Priestley's great powers of organization, the devoted labours and strong personality of Captain Vidal and, after his recovery, the splendid work of Captain Lauder, that gradual improvement in the conditions was due.

These tragic, horrible events at Wittenberg are perhaps among the worst that occurred in Germany during the war, but it is unfortunately true to say that many other camps had records which must stand for ever as blackest indictments against the responsible German officers in command. The treatment meted out to British officer captives at camps under the jurisdiction of General von Hänisch is an example, and it will suffice to quote extracts from the report of the British government committee

on the occurrences at four camps—those at Clausthal, Ströhen, Schwarmstedt, and Holzminden.

The first-named was situated at a summer week-end hotel in the Harz mountains. Pleasant though it may have been for occupation by summer holiday-makers, it was under snow from November until April, and in spite of this fact and that the building (made of match-boarding) stood 2,000 feet above sea level, no heating was allowed in the rooms. The report states:

> The dining-room was disgracefully overcrowded, dirty and filthy. . . . It was inadequate for the officers (120) living in the hotel, and its utter incapacity may be realized when to that number a further 130 from the huts are added. It was quite impossible for the orderlies to keep the place clean. First, it was the only place available where the officers could sit to read, work, smoke or play cards, chess, etc. Secondly, the officers, in messes of from two to six, had to prepare their food here for cooking. Thirdly, the orderlies had to use it as a scullery to clean up not only crockery and cutlery, but pots and pans as well.
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> A form of collective punishment repeatedly used in this camp was to close the lower half of the grounds. An alternative once employed during two winter months was to deny light in the bedrooms, thereby compelling officers to sit in a freezingly cold room in the dark from, say, five p.m. to nearly 10 p.m.—five whole hours—when the lights were turned on for a few minutes. Complaints were made of the sanitation in the camp, and the washing arrangements were insufficient. After August, 1917, there were walks on parole at the rate of a walk to each officer every six weeks.
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> The tone of the camp will be understood from the methods of a man like Niemeyer, the commandant, who encouraged guards to shoot. "An officer . . . . having dropped his cap from the window, jumped out to pick it up, and although not in the five yards (neutral zone) was fired at by the sentry, who fortunately missed."
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> The quarters which had been sufficient for punishments at the beginning of the camp's history had been one cell, "a small room . . . . next door to the pig-sty on two sides, and to the electric motor-house on the other, a most foul place." It was abandoned in consequence of the protest of the officers. "However, on the arrival of General von Hänisch, the latter gave instructions that it should be used, and was good enough for English." Later, it was replaced by a hut completed towards the end of June, 1917, which contained 16 cells or more. These, henceforward, were always full, except for some kept empty for officers who attempted to escape.

Of Ströhen the committee's report states:

The camp at Ströhen Moor was some two acres in extent. It comprised three large, two medium, and three smaller wooden huts or sheds, a hospital, dining and reading hut—all in a bad state of repair—within a doubly barbed-wire square enclosure, the whole situated in the midst of four swamps. In the centre lay two stagnant pools. On the east side of the camp, close to the trench latrine, the foul condition of which was a continuous infliction on the prisoners, were two pumps, one with fresh water of indifferent quality, and the other with water of a dark colour. The camp in wet weather was a morass; in hot weather a place of dust-storms and stench.

Ströhen, it is said, had been a camp where Russian and Roumanian officers had been treated with exceptional severity. Its commandant, Major von Kichton, was a savage man, unrestrained either by feeling or reason. The attitude adopted by the guards throughout the period when von Kichton was commandant, and during the six weeks subsequent to his departure when Hauptmann Niemeyer, afterwards commandant at Holzminden, succeeded him, was uniformly threatening. The cells were always full, while a long list of officers sentenced awaited their turn for confinement. Punishment was given on the word of a guard without appeal, and with the most arbitrary indifference to justice, as when a teetotaller was sentenced for drunkenness, or an officer was shut up for an offence of which a comrade admitted himself to be the author. Walks were no more encouraged at Ströhen than at Clausthal. No reason was given for the denial of this slight solace for prisoners penned up in a camp too small for customary exercise.

The principal complaints in regard to Schwarmstedt centred around the living conditions rather than the attitude of the captors towards their prisoners. For example:

Schwarmstedt camp is situated on the main Lüneberger Heide, north-east of the river Aller, about seven miles from the town of that name. Within an area of four and a half acres it included three dormitory huts, one canteen and dining-room hut, and two smaller huts for officers. It contained 400 officer prisoners and 80 orderlies. Before May, 1917, it had been occupied by Roumanian officers, earlier still by Russian soldier prisoners. Like Ströhen, the camp was a quagmire in wet weather. The drinking water had a bad colour, taste, and smell, the sanitation was deplorable, the light defective. There were no adequate washing arrangements; the German food was offensively cooked, and, except during the first fortnight, when there were no parcels, it was usually left untouched, when, even the hungry guards refusing to eat it, it was given

to the pigs. The buildings leaked, and the prisoners were crowded together. In addition, the camp was exceptionally dirty.

The prison was kept full, with a waiting list of officers sentenced but not punished. There were the endless appeals and queues, and oppressive searches. Yet the commandant was not thought to be actively malicious or revengeful. "Colonel von Diest did his best to make things as bearable as he could for us; for example, he had a parcel room built and several stoves installed, but his attempts were in nearly every case frustrated by General von Hänisch." The non-commissioned officers, who at first shouted at the prisoners, quickly behaved themselves more correctly towards them. Thus life at Schwarmstedt was not a constant suffering. While the soil of the camp did not lend itself to games, free walks on parole were allowed and enjoyed. These facilities were later much curtailed from headquarters, and General von Hänisch himself prohibited the use of the swimming bath.

At Holzminden, evidence of similarly bad conditions of life was also obtained:

The buildings, which were new, were composed of two barracks, in one of which was installed the administration of the camp with the guard; in the other, the orderlies, in addition to the officer prisoners. The space was by this disposition crowded to excess. The indoor conditions were also particularly unfavourable for sociable occupations. There were no common rooms, no space in which to study, hold classes, or give entertainments. Officers were obliged, therefore, to pass much of their time in the over-crowded, unfurnished, and unheated sleeping rooms. The only sitting-rooms were, as at Clausthal, the dining-rooms of the barracks. Officers suffered besides from the lack of appliances for washing, but the camp was better provided in this regard and in that of sanitation than in any of the others in the Hanover command.

The prison cells, which were always full, in the cellars of the barracks, were most unsuitable. There were no sanitary arrangements in connexion with them, and it is said that the food of imprisoned officers was served out on the floor of the space on which were placed the make-shift latrines. Another hardship at Holzminden was particularly severe for British officers, the absence of recreation. Football was forbidden within the camp area; hockey equally was almost impossible, for the ground was too small, though it might easily have been enlarged. All that remained was the opportunity of taking walks in the neighbourhood, but here, owing to General von Hänisch's action, the walks were interrupted till February, 1918.

At the beginning of this chapter it is stated that life in German prisoner-of-war camps varied a great deal; the foregoing accounts of hardship show the worst aspects. It is of some satisfaction to record, therefore, that not all camps were run in so iniquitous a fashion. Where the commandants were reasonable and considerate, the lives of the men through the months and years of imprisonment were made, at any rate, tolerable, and just as those who suffered were unhesitating in their condemnation of the captors, so others who received fair treatment were ready to show their appreciation.

In particular, the German medical officers, as a whole, showed a humane consideration to the men, and a typical example is referred to in a book written by H. C. Mahoney, entitled "Sixteen Months in Four German Prisons." This medical attendant, a Dr. Ascher, because of his attitude, was extremely popular with the men at Serrelager camp. Just and kind, he did what he could for them. He chided the guards for their rough conduct, and on one occasion actually rescued from ill-treatment a body of men, including some British prisoners, who had been set the impossible task of hauling for three miles a huge traction engine which had broken down on the road. Seeing that those who were attempting to move the engine were far too weak and exhausted for such an effort, he ordered them to desist, and took them to an inn, where he told them to order what they liked, at his expense. "We were so dumbfounded," was Mr. Mahoney's comment, "at this first expression of a 'white man's' action which we had encountered in Germany, that we could not utter a sound. We merely sat like a party of expectant children at a Sunday school treat." This good doctor saw that the prisoners had a proper meal, and he insisted on their washing it down with beer or lemonade. Then he enjoined a short period of rest in aid of digestion. "You can imagine how we clustered round the doctor, thanking him for his kindness, but he would not listen to our expressions of gratitude. . . . When he next came into the camp," added Mr. Mahoney, "he received such a thundering and spontaneous ovation as to startle him, until at last the reason for this outburst dawned upon him, but he turned it off with his characteristic laugh and joke."

CHAPTER 31

Salving War Material

On the modern battlefield there must necessarily be a great deal of unavoidable waste. The dead are left with their arms and ammunition beside them, the wounded are often obliged to discard all impedimenta to save their lives. In rapid attack stores are outrun, and in retreat abandoned. The ground becomes strewn with valuable material. There was no thought of salvage during the first period of the war, when the armies were manœuvring against each other and trying at all costs rapidly to achieve a decision. Everything was sacrificed to quickness in the delivery of the blows. The first phase of the battle in the west concluded with the contending forces impotently gazing at each other, in December, 1914, with munitions on both sides almost exhausted, and the ground over which they had struggled littered with the things they wanted.

The British army was the first to start collecting waste material, for the reason that it was less well equipped than the German army. British sappers opened up a branch of the rag-pickers' trade by displaying an intense interest in empty jam jars, bully beef tins, and sardine boxes. The troops lacked hand-bombs, and the Royal Engineers had to improvise out of empty jars and tins short-range high-explosive missiles that could be pitched into the German trenches. The penury of material transformed the last of the heroic British regulars into the best exponents of the art of salvage the world had seen since the days of Hannibal.

In the British army hundreds of thousands of recruits worked for months in civilian clothes and trained with imaginary rifles because of the shortage of both khaki and Lee-Enfields. Even among the ragged, wet, vermin-infested men in the ditches around Ypres there was not sufficient clothing, as new uniforms did not arrive as quickly and as abundantly as might have been expected from the country with the largest wool weaving industry in the world.

But two wounded British officers, unfit for further active service, had the happy idea of helping the forces in the field and finding work for refugee women by opening a repairing shop in France. They began by gathering a few seamstresses together and collecting torn uniforms, and they developed their establishment into a splendid salvage organization that helped the khaki mills, and also served to inspire salvage work on a large scale in other directions.

Although it does not seem to have been clearly known at the time, the saving of a soldier's clothes often meant the saving of his health. He needed frequent and complete change of underclothes and uniform to free him from vermin-carried trench fever and other diseases. It took some years for men of science to trace trench fever to body vermin, and devise changes of impregnated clothing for the troops; but the salvage work begun as a little war charity in the first months of the struggle was the basis of all that followed.

Boots were even more important than clothes. After less than a fortnight of fighting, Sir John French's men were in desperate need of boots. When trench warfare settled in its long course, many regimental officers either started repairing shops of their own or engaged contractors to keep the battalion well shod. The boot, however, was too important a thing to be left to individual officers. On it depended the marching power of the army, and for this reason it engaged the concern of the commander-in-chief, who in June, 1915, appointed Sir John Steevens, the army salvage expert, to organize large central repair shops. One was opened in Calais in the autumn of 1915, another was founded at Mudros during the Gallipoli operations, and afterwards removed to Salonica. Later a shop was erected at Alexandria for the army of Palestine; while the army of Mesopotamia had its boots repaired at Basra. Other works were organized in England and Scotland.

Instead of the army having to buy boots in extravagant quantities, far fewer were required. Large as was the economy in money, this was of secondary importance. The great thing was the saving in the stock of available leather, upon which all the Allies constantly needed to draw. Moreover, the British manufacturing plant for army bootmaking, when partly released from service for the new army, was able to work for millions of Allied troops. By the summer of 1918, when the United States

STRASBOURG WELCOMES THE LIBERATORS. On November 25, a fortnight after the Armistice, the capital of Alsace-Lorraine was entered by the French 4th army, led by Marshal Foch. Marshal Pétain, General Gouraud and other army chiefs. The illustration shows French cavalry passing along the Pont National.

G. P. U.

SURRENDER OF THE GERMAN HIGH SEAS FLEET. In accordance with the terms of the armistice, Germany had to surrender six battle-cruisers, ten battleships, eight light cruisers, fifty destroyers, and all her submarines. The surface ships arrived off Rosyth on November 21, 1918. The photograph shows the German battleships steaming to the rendezvous in line ahead, one of the most powerful of Germany's warships, the Bayern, being nearest the camera.

Humphrey Joel

WITH OFFICERS OF THE VICTORIOUS NAVY. Here Queen Mary is seen shaking hands with a young officer of Admiral Beatty's flagship, Queen Elizabeth, when she was present with King George at the surrender of the German High Seas Fleet off the Firth of Forth

Royal Air Force, Official Crown Copyright

TRIUMPH OF THE BRITISH NAVY. This is another striking photograph of the German surface ships which came to Rosyth for internment on November 21 1918. The rivalry of twenty years was over at last. It had closed in shame for the German Fleet. Beatty's historic signal on this momentous day ran: "The German flag will be hauled down at sunset to-day and will not be hoisted again without permission." The majority of the ships were sunk by their crews at Scapa, on June 21, 1919.

army was attaining enormous size, most of the civilian population of the British Isles would have been wearing wooden soles and canvas uppers if the military forces had not been exercising for three years remarkable care and organizing capacity in turning old boots into new, and also providing repaired army boots for farm hands and other workers.

Another general advantage was derived from the working of the command repair boot shops. As doctors in a hospital discover from the study of disease how illness can be prevented, so the military boot salvagers, through whose hands millions of outworn pairs passed, were able to study ways of making boots with a longer life than any footwear possessed when the war broke out. They designed new technical details of construction, and experimented with linings and other material, until by 1918 the British army boot was becoming as near perfection as thousands of practical critics could make it. The men worked in teams of five, receiving ordinary pay up to 30 pairs of boots a day, and a bonus shared among them on all boots repaired over that number. Under this scheme each man increased his power of work, turning out 900 pairs of boots a year more than before.

The repair of guns was taken up about the same time as the repair of boots. In the matter of artillery the British Expeditionary Force was so completely overwhelmed by the enemy that necessity again became the mother of economy. Too much time had been lost by sending slightly damaged guns back to England for repair, so the army in France and Flanders did all it could to save time and transport. Works were erected there at which small repairs could be effected. Then larger plant was obtained and special workmen were taken over the English Channel, until the artillery repairing establishments became a great help to the army and a relief to the steamers for which more cargo was waiting than could be transported.

Repair shops for motor-vehicles formed another early branch of salvage work. Even when a chassis was completely smashed the engine was useful, and those handy men of the army, the Royal Engineers, whose jobs became immense in number as well as in scope, could find good ways to use many things that seemed no longer serviceable. The engineers fagged for the army, mended for it, and did most of the early salvage work.

When, however, the new British armies arrived in the field in the summer of 1916, with a startling abundance of war material

provided by the new ministry of munitions, the general spirit of economy rather diminished. In clothing, boots, and a few other articles that quartermaster sergeants could control, the saving system was maintained and developed. Systems of repairing firearms, guns and motor-vehicles were also extended. In other directions the waste far surpassed that which had occurred during the early battles of manœuvre in the open field. A remarkable proportion of bad material, due partly to the inexperience of new makers, was the principal cause of waste.

In the summer of 1916 the Germans were the grand exemplars of the new art of combining battle operations with the ragpickers' business. Under the pressure of the partial naval blockade maintained by British ships the Germans began to develop the idea of salvage to its fullest extent. They applied it to the armies in the field, and to civil populations at home and in occupied territories, directing their activities to the recovery of metals, clothing material, and foods and fats. Articles of lead, tin, copper, aluminium, and other valuable metals were gathered by house-to-house collections. Damaged machinery was broken up, and even good machinery was taken to pieces, so that parts of rare metal might be replaced by parts made out of common metal. Millions of empty tins were carefully collected and sent to Essen and other centres for the tin to be extracted by chemical processes. Old tins were also collected in neutral countries adjoining Germany, and brought over the frontier to the tin-extracting works.

All clothing supplies were controlled by the German government. Outworn woollen material had to be given to the authorities, and mattresses containing woollen or cotton stuffings were commandeered, and returned to their owners stuffed with paper, seaweed, or shavings. The small German stocks of leather were rigorously conserved for army purposes, and substitutes were devised for industrial and civilian use. The skins of dogs and rabbits were tanned, fibres were woven from nettles and wood pulp, and prolonged and intense experiments were conducted in the hope of finding practical substitutes for sole leather and rubber. Ludendorff, Hindenburg and Mackensen were, however, the best of German salvagers. On each occasion when they forced the Russian and Rumanian forces back they made a rapid yet careful collection of all cloth and leather articles, in either good or bad condition, and dispatched this valuable spoil

to special salvage depots. The rubber, copper, linen and canvas which the eastern Allies left when they retreated were gathered by the careful Germans, who likewise managed to acquire copper mines during their offensive in the east.

At home the Germans arranged a systematic collection of fruit kernels, from which oil could be extracted, and began that strange and apparently ridiculous quest for fat at which the Allies ceased to laugh when they, too, found that fat was one of the grand problems of the war. The German started with extracting fat from his horses and mules that fell on the battle-field or died of overwork or disease behind the front. He also collected fat in his army and municipal kitchens, for fat was the raw material of nitro-glycerine, which in turn was the explosive element in modern artillery.

Enormous quantities of fat were also necessary for making lubricating oil to save machinery and rolling stock from wearing out. At the same time fat was needed as human fuel in the hard winter weather of northern Europe, and as through lack of fodder the Germans had been compelled greatly to reduce the number of their pigs, they were at last hard put to it to obtain the fat they required. To some extent the enemy's famine in fat and other materials of war was relieved by his conquest of the Rumanian oil fields and large tracts of Russian territory. He restored the Rumanian oil wells to working order, and, with the help of the Turks, began to get control of the Baku petroleum works, and also obtained more copper and other valuable metals.

By the time that the blockade of German commerce in the west was transformed from a demonstration into a reality, by the entrance into the war of the United States and Brazil, the Germans had saved themselves from exhaustion in raw material by their vast and intensive salvage system and their progress in the east. Although the Central empires did not obtain all the corn they hoped to grasp in Rumania and the Ukraine, the Germans acquired a vast amount of material of direct military value, together with such opportunities of getting a succession of regular quantities of the things they needed as enabled their leaders to contemplate the prolongation of the war with confidence.

In the meantime, Great Britain, France and Italy began to suffer from the submarine blockade. The rate at which shipping was destroyed by the enemy in the spring of 1917, and the rate at which the process of destruction continued through the

summer, produced symptoms of somewhat serious shortage in all imported materials. A poor harvest, in conjunction with a weakened mercantile marine, led to a shortage of food in Italy, France and Great Britain. This in turn produced, as in the first hunger crisis in enemy countries, a shortage of fodder, with the result that pork fat, animal fat, and butter grew scarce in the period when the supply of vegetable fats was diminishing.

So long as her marine power was intact Great Britain had remained fat collector, soapmaker and glycerine manufacturer to the world. She had at that time merely to make larger quantities of soap for her export trade in order to obtain all the glycerine needed by herself and her western Allies for the use of her guns. When, quite unexpectedly, in the third year of the war fat became scarce in Great Britain, it was clear that the Briton would have to fight the German in the laboratory as well as on the battlefield, and also endeavour to beat him in the vital, new national business of rag-and-bone merchantry. Then arose the problem of inducing the British soldier to take an interest in salvage work. By nature he was a careless person, representative of a race used to working hard and spending quickly, and he did not in the least relish adding to the duties of a fighting soldier those of a scavenger. This attitude of mind is to be excused to troops who had been holding the line or had been in support for many days.

As a perfunctory salvage worker the Briton was not a remarkable success. He began collecting the waste of the battlefield towards the close of the Somme campaign in 1916, but as a rule his officers had to go out and oversee him if they wanted their division to distinguish itself in the eyes of the quartermaster general. Yet, as the Guards division afterwards showed, when it was set salving on the field of its victory by the Pilkem ridge, during the third battle of Ypres, the easily recoverable waste was enormous. The Guards picked up 1,000,000 rounds of unused small-arms ammunition in addition to many intact cases. The cartridges had loosened from the clips into the pouches, and then jolted to the ground. The guardsmen reckoned that they had made a valuable contribution to the cost of their division by the recovery of waste.

Salvaging in the lake of mud between Ypres and Passchendaele ridge, however, was often an impossibility. When sunken guns could only be indicated by improvising buoys above them, the

smaller material remained buried, for the Flemish peasant to go on recovering in rusty fragments, for generations. What with unexploded shells and unused cartridges and bombs, the battle swamp was likely to be a dangerous place to plough and harrow in the years of the coming peace.

While the wrestle in the mud went on at Ypres, salvage operations were begun on a grand scale in the large tract of temporarily recovered country between the Somme and the Hindenburg line. In the autumn of 1917 Mr. Andrew Weir, the new surveyor general of supply, visited France in connexion with the formation of an army salvage branch. Splendid work had already been accomplished by the military authorities. From army kitchen refuse sufficient tallow was derived to provide army, navy and government departments with soap, and sufficient glycerine to propel 23,000,000 shells, and from worn-out clothing woollen material worth £1,000,000 was annually derived. Mr. Weir, however, was bent on fighting the enemy's submarine campaign by devising new ways of saving tonnage. He had reorganized the military supply services in a most enterprising manner.

When tonnage was lowest the need for tonnage was highest. A great increase in transporting power was required to bring the United States army to France and to maintain it there. The special feature of Mr. Weir's plan for saving the economic strength of the Grand Alliance was a system of intensified salvage, conducted directly in places where material was most lavishly used. Unless the private soldier could be induced to take up the work in a hearty manner, the vast sea of recoverable material would only be skimmed. Mr. Weir formed the army salvage branch to co-ordinate the military operations of collecting material with the commercial work of disposing of waste. Special efforts were made to prevent large quantities of salvage being gathered together without order, as such accumulations were found to result in heavy losses through deterioration. Far-seeing arrangements were necessary to obtain rapid circulation of recovered material and make the best use of the small shipping space available for the return of damaged stores.

When, however, the new machinery of organization was set in working order, the motive power behind it remained somewhat slack. There was a board in London, consisting of the quartermaster general, Sir John Cowans, the surveyor general of supply,

various representatives of the War Office and the ministry of munitions, together with men with special knowledge of disposal and transport. Major General Atcherley was appointed controller of the executive department, and one of the first new steps of importance taken was to induce the army in the field to use old material to a larger extent than had hitherto been considered desirable from a military point of view.

But the British soldier, upon whom the burden of the business fell, was exhausted by the series of great offensives conducted throughout the year, from the closing battle on the Ancre to the disastrous end of the Cambrai campaign, and the salvage work continued to go against the grain of many officers and privates when they were told off on scavenging jobs during periods in which they reckoned they were entitled to rest. Somebody with a talent for advertising endeavoured to make salvage work popular by adorning the sinister theatre of war with appealing placards resembling the war loan posters at home. Columns tramping to and from the firing line had flung at them at intervals along the roadside the question: "What have you salved to-day?" Motor-lorries running up to the forward zone had the demand lettered upon them. Some enterprising major generals touched the mainspring of action in the minds of their men by arranging a competition to which the best of prizes were attached. It was apparently a sporadic movement, for the Guards division and others do not appear to have been affected by it. Yet where it was instituted salvage work became an absorbing interest of non-commissioned officers and men from the winter of 1917 to the spring of 1918.

The scheme was worked by brigades, in each of which the battalion that did best obtained most points for leave. It became at last possible for every man to look forward to getting 14 days' leave in every eight months if salvage team-work was excellently carried out. Where, for example, the ordinary leave in a brigade was 10 men a week, it was possible to increase it to 20 men a week. That meant that every man's turn came round twice as quickly. Each company competed by means of salvaging platoons that worked as hard as possible when at the front, and received as compensation lighter duties than the others when in rest billets. About December, 1917, some of the companies started wagering with each other over the results of the race in salvage work. "Two little round hats" was the army slang

for the usual price of victory between the contending sergeants of rival companies. The little round hats were the tin coverings used on the new beer bottles instead of corks.

Working-parties looking after trenches or wiring-parties had the best chance of big salvage. Barbed-wire and screw pickets for fixing wire were often scarce stores, yet there was usually plenty to be recovered in the land between the support and the front line. There were sectors in which extraordinary zeal was displayed for explorations into this friendly No Man's Land. Officers were alert to these unofficial expeditions of their men. The reason usually was that one of them had found a store of valuable stuff, which he wanted his company to get into the battalion dump.

Eighteen-pounder cases were excellent tickets of leave. They were made of solid drawn brass, and cost only about three-halfpence to straighten into material worth 8s. 6d. Howitzer charge-cases for the 4.7 in. gun were also useful, and there was much in the form of equipment, rifles and ammunition to be picked up in certain places which the enemy afterwards over-ran. One party near Epéhy made the remarkable salvage haul of three field guns, together with a store of shells. Often a platoon would have two or three men working all day and all night, and the sergeants saw that the men who worked best were especially well treated. After a man had done all his work as a soldier holding the line he needed some encouragement to induce him cheerfully to carry sand-bags full of tins to the salvage dump.

Where, however, the new competitive system obtained there was a great pile of material collected by each battalion when the brigade quartermaster came round to do the pricing. There were tin dumps, waste paper dumps, food container dumps, and, where the brigade was happily situated for exploring purposes, there were dumps of brass cases, charge-cases, small arms ammunition, and general equipment. German rifles were especially useful; they could be converted into material for some of the Allies, even as the Turkish rifles salved on the Gallipoli peninsula had been converted for the Serbian forces.

Each company saved its fat and sent it through divisional headquarters for manufacture into cordite. All soups were skimmed; the fat from bacon was carefully gathered, and the meat was usually stewed, so as to get more ammunition material into the biscuit tins in which the cooks kept their special salvage.

Soldiers who used to jump over shell-cases, leave rifles sticking out of mud, and chop up duck-boards to make fires in the trenches, became the most painstaking of savers when the fatigue work of salvage was glorified by competition for leave.

Platoon dumps were priced week by week, or at any time, but the grand ceremony of umpiring the main salvage collections took place usually at monthly intervals. Practically everything had some value. From cardboard containers, for example, there could be extracted wax of the value of £100 per ton, with wood pulp suitable for paper making or for direct munition purposes. The collection, in return and repair of such minor articles as containers, oil-drums and boxes, meant a saving of £5,000,000 a year, and a rapid recirculation of package material that saved shipping and facilitated the supply services.

The tin canister became a grand national problem. It was closely related to the steel shortage, the tin famine, and general lack of shipping. It was also a touchstone of the real efficacy of the new movement for economy. In every country in which English was spoken the tin can had been, for a generation at least, a nuisance. In northern America it was one of the main elements of unsightliness. The ingenious German, on the other hand, loved the tin can. One of the reasons why it had not been so immense a nuisance in Great Britain as in the United States was that the German firm of Goldschmidt collected British tins, desoldered them, and shipped them to Germany, where the cleaned sheet metal was returned to steel works, after a valuable chemical, tetrachloride of tin, had been extracted for use in silk manufacture. When Herren Goldschmidt ceased to act as scavengers for Britain, the empty, disreputable tin can enormously increased in number owing to the import of bully beef and other tinned articles for military and general use. There were armies that could have erected pyramids from the tin cans for which they could find no use, yet solder was increasing in value and rarity, and tin and steel were badly needed.

So long as the tin can was neglected it could not be maintained that the application of science to the utilization of waste material had been thoroughly undertaken. For it was clear that the Briton had not reached the degree of technical efficiency that the German had attained in his detinning works long before the outbreak of war. The order restricting the supply of tin plate to the British civilian population was but a measure of palliation.

What was needed was an undertaking similar to that which Herren Goldschmidt had established in Germany for cleaning and baling the steel and extracting the tin and lead. Before the war 150,000 tons of used tin steel-plate were exported yearly from Britain to Germany, and the Germans also obtained large supplies from tin cans conveyed from other countries as ballast in trading vessels.

In France it was accounted a wonderful feat when an army could salve 2,000 tons of steel from the field of its victories. But in the old tin cans, which were an accumulating nuisance to that army, there was far more metal available for foundries and for the release of overburdened ships. There were three ways in which old tins could be dealt with. In the first place the tin can could be cut up for making smaller canisters. In the second place the cans could be returned in their original packing cases to British manufacturers, who then required a much smaller number of new tins in which to circulate their goods. In the third place the cans could be placed in washing tanks, immersed in a soda solution, and subjected to electrolytic treatment for the recovery of the tin. The solder could be extracted in a desoldering furnace, and the metal then pressed into hundredweight blocks for dispatch to the steel works.

British steel makers, however, were for long averse to taking the scrap. Their prejudice was largely due to the results obtained by British municipal authorities, who used an inferior method, in which all the tin was lost and a very poor kind of metal left. Not until the national salvage movement was strongly organized were large measures taken to equal the enemy in this important matter of saving waste. It was an affair intimately connected with the complete industrial efficiency of the country after the war, as well as with the immediate necessity of overcoming the shortage in metal.

In the meantime the armies in the field made good progress in some of the most intricate forms of salvage. Far behind the lines were salvage aerodromes, to which everything that tumbled from the air was brought in motor-lorries. These were utilization factories for the carcasses of crashed enemy bombing and fighting aeroplanes, as well as hospitals for damaged British machines. The aeronautic doctors were masters of the art of reconstruction. Out of two maimed structures they would make a sound one, and often repair a second aeroplane from the remaining wreckage.

Daily miracles in utilization were performed by means of commonplace but intense orderliness. Every part of a usable thing was placed in finely arranged stores, which became a reservoir of spares for squadrons and a fountain of supplies for the salvage shops, where new or rebuilt machines were turned out in regular quantities. Some of the wood-working shops were noted for daring ingenuity. They would not let badly damaged spars go to the waste heap, along with the tattered linen and crumpled steel, for final utilization. The broken stuff was cut up and, with only a small amount of new material, fashioned into machines that often did better than any of the aeroplanes to which the original parts had belonged. Devised on the battlefield to help immediately in winning the empire of the air when there was dire shortage of machines, energized by the overseeing presence of experienced pilots, usually convalescing, who knew better than anyone what was wanted in a machine, even if they did not know how to make it, the salvage aerodrome had an atmosphere of inventiveness and activity strangely different from some civilian factories.

The British workman behind the battle line in France, with hostile reconnaissance aeroplanes sometimes sweeping above his shop by day, and enemy bombing machines searching for it occasionally by night, was a worthy mate of the soldier. The glow in his eyes, when from some salvaged fragment he skilfully made a good new part, was a reflection of the fire in his mind. As machines of first-rate type grew happily common there was a loose kind of standardization which facilitated the admirable work of the salvage aerodromes.

In this respect, however, they could never hope to attain the ease and rapidity of reconstruction of rifle, machine gun, and artillery salvage works. The precise standardization of parts in firearms and ordnance made the work of repairing and rebuilding this highly important material largely an affair of the organization of plant. From mobile hoists for lifting damaged guns from the battlefield on to motor-trucks, under cover of night, to the powerful machinery in the gun hospitals, organization was everything.

Here the French had many advantages, as they were immediately backed by their great munition works, yet they had something to learn about salvage from their English-speaking Allies. The Americans, too, had some methods of their own

from which the British could derive benefit. In the salvage of motor-vehicles the American army began to attain express speed. Instead of turning each injured car over to a small party of mechanics for repair, in the individual European way, the American erected a great plant for wholesale salvage on the Ford system. Each ordinary working group did one thing only, without moving from one spot to another. It was the damaged parts that moved, in travelling clutches or other devices, until they were ready to be assembled in a repaired or reconstructed vehicle. Great as were the labour and expense of erecting and equipping such establishments, they not only quickly saved their cost but they had a profound effect upon the French mind. They were indicative of the strength and staying power gathering behind the American preparations.

There was naturally a great set-back to general salvage operations when the critical enemy offensives began in the third week of March, 1918. It was the Germans who best answered the placarded question on the roads by the Somme: "What have you salved to-day?" For a time, General von Hutier, General von der Marwitz, and General von Quast completely eclipsed Mr. Weir in organizing the collection of battle material. Yet amid the shattering, disordering tumult of the struggle, the main part of the scheme for saving shipping, material, and labour by saving waste increased in importance. The first intensive British salvage operations had followed upon the enemy's period of success in submarine piracy. They had contributed to help the country over the most dismaying stress in shortage of tonnage. When, in the third week of March, 1918, the Allies began to lose the extraordinary mines of metal, and all the treasure-trove of unused or slightly damaged material found on their victorious battlefields in 1917, the hostile submarine campaign was being held and the production of new shipping was being increased. The great campaign of economy had not lost interest for those soldiers who had taken part in salving competitions for points in regard to leave.

To them the tin-can dump was still a romantic memory during the fierce battles when only a "Blighty" wound could earn a fighting man a little rest at home. In camps and bases in the main theatre of war the new salvage movement went on, and spread to the remoter fields of struggle in Palestine, Mesopotamia and Salonica. It was something to have reduced to

practice a system of conservation and scientific recovery of material before the enemy resumed the grand battle in the west. For it would have been impossible to have popularized the salvage idea among the soldiers after the resumption of open field warfare, when British divisions were fighting with their backs to the sea and French reserves were sandwiched between them, with long, intermingling routes of supply from Ypres to Reims.

Yet when, in the summer of 1918, the tide of battle turned, between the Marne and the Somme, the salvaging forces of the army soon had enlarging fields of victory on which to carry out their work, with the enlarging methods of intensive recovery of material practised during the previous winter. The combination of a new rapidity of advance with a new system of salvage enabled the western Allies partly to lessen their demands for cargo space during the turning months of the war, when the United States forces were in need of every possible ship to swell their available transport to France.

Once again battlefield after battlefield became a great, immediate metal mine for the Allies. Fiercely pressed in their retreat, the surprised Germans left large tracts of country littered with highly valuable waste of war. The booty of weapons, shells, trains, and timber was scarcely of such importance as the vast masses of salvage spoil which gradually were sorted out and sent to feed the famishing foundries and metal works of France and Great Britain. By throwing the enemy back Foch recovered, in broken railway lines, shattered guns, motor-lorries, and other material of war, an amount of metal and timber that saved the carrying capacity of a great mercantile fleet and the labours of a host of miners and woodmen.

The general need for constant salvage was, however, increased rather than diminished by the magnificent series of victories of the Grand Alliance. The great and sudden augmentation of the armed forces of Great Britain, followed by enormous preparations for enlarging the expeditionary force of the United States, aggravated the strain upon the shipping power of the Allies. This, in turn, made it absolutely necessary that salvage operations should be intensified generally, both among civilian persons in their houses and at their works and among sailors at sea and troops in camp and in billets at home and abroad. There was fine scope for municipal enterprise in many directions.

CHAPTER 32

The Value of Wireless

PRIOR to 1914 both the army and the navy used wireless telegraphy extensively, and the authorities fostered a considerable amount of research work over a period of some 15 years. This resulted in a gradual extension of the range of signalling, and equipment went through definite stages of development. In all this work the Marconi Company contributed a large share; the British navy in 1913 had some 435 ships equipped with wireless and there were about 30 shore stations. With these, much experimental work was done. The military forces also practised wireless methods of command in the field, and some preliminary tests were carried out with radio-telegraphy in connexion with aircraft.

The British government were fully aware of the potential importance of electric-wave communication in warfare. By reason of their early support of Marconi and the assistance he had obtained in Great Britain in commercializing his primary inventions, the British should have been very favourably placed in the matter of wireless telegraphy at the outbreak of hostilities. Unfortunately the strong position in this field, which might have been Britain's, was not assumed because the chain of powerful stations scattered throughout the British commonwealth, which was necessary to complete a vast network of communication, had not been completed. At the same time, Germany, with her usual foresight, had been pursuing a vigorous policy of wireless development which stood her in good stead when the war began. Subsidized by the German government, the Telefunken Company was able to obtain many foreign orders for the erection of wireless stations by underbidding the unaided British Marconi firm, and before the war £2,000,000 was spent in Germany on a wireless development programme.

The Nauern station, near Berlin, was made the centre of the German world wireless system. The engine power used was increased from 35 h.p. to 1,000 h.p., giving a range of 6,200 miles. Under favourable electric conditions, signals could be

heard at Windhoek, in South-West Africa, and there were connexions and relays with the Togoland and Dar-es-Salaam stations. In the United States there was a German station at Sayville, Long Island, for which new and more powerful equipment was prepared. Between 1911 and 1913 the Germans attempted to obtain permanent land stations in Nicaragua, in connexion with the Panama canal, and also to acquire complete control of wireless plants in South and Central America, working in connexion with Sayville. In the South Seas the German Rabaul station of New Guinea was a menace to Australia and New Zealand, and with other German-owned or German-worked plants had a deciding influence on naval operations there.

The Germans also had at Eilwese, in Hanover, a new kind of wireless station, communicating for some 4,000 miles with Tuckerton, in New Jersey. A novel system of continuous electric-wave transmission was employed in the Eilwese station, with the advantage that the messages could only be received by special detectors. However, the Marconi Company had acquired before the war rights in the Goldschmidt continuous-wave system, and read the messages as easily as ordinary signals. The Austrian wireless at Pola communicated with Spanish stations, and the Turks had a station outside Constantinople, which had already rendered important military service during the Balkan war, and maintained communications with Berlin.

In the first month of the war Germany derived profit from the £2,000,000 she had spent in wireless preparations. For a time, a large part of the national fortune invested in shipping was saved by sending out wireless instructions for all vessels at sea to make for neutral ports. The Pacific coast became the refuge of a large number of German ships, and until the United States entered the war many steamers of magnificent tonnage and power in American ports escaped capture by the Allies. To a considerable extent Senatore Marconi became unwittingly the saviour of the German mercantile marine. Without his invention, German shipping on the high seas would, in large measure, have served to increase the carrying power of Great Britain, through being captured before the skippers became aware that the war had opened.

In France excellent work was being done by aerial observers cooperating with the artillery, and the evolution of an improved wireless set during 1915 broadened and speeded up their

activities. The usual procedure in the beginning was for the airman to carry out his reconnaissance, return to his aerodrome and give his report, but with wireless installed in his machine he was able to send messages while still in the air. These messages were answered by an arrangement of white canvas sheets placed on the ground in various formations, each conveying different meanings. As time went on this system of aerial communication became more and more elaborate, eventually reaching a remarkable stage of efficiency, to be finally eclipsed by wireless telephony in the last year of the war.

When all German cruisers and early auxiliary steamers were destroyed on the open sea, the wireless stations remaining directly or indirectly under German control in foreign lands became serviceable for political and general ends. Also the German campaign of submarine warfare was promoted by the various use of wireless communications. The U-boats were at first unable to receive the long waves from the Sayville, on Long Island. This difficulty was overcome by the Nauern station, near Berlin, taking the messages in special code and transmitting information in shorter wavelengths suitable to the submarine apparatus.

The part which the Sayville apparatus played in the submarine campaign and general policy of intrigue was remarkable. It was traced by Mr. John Rathom, an Australian editing the "Journal," of Providence, U.S.A., and by Mr. Charles Apgar, an American owner of a private wireless station at Westfield, New Jersey. Mr. Rathom had wireless operators studying all messages sent and received by the Germans, and thereby discovered there was constant communication between many large commercial and shipping houses in the United States and the German government. Code numbers and combinations of letters, which were used by the German embassy in its messages to Berlin, were in many cases found in messages sent out by the Atlantic Communication Company of Sayville, the Siemens and Halske Company, of New York, the Hamburg-Amerika line and North German Lloyd line, and many other concerns.

From his wireless discoveries Mr. John Rathom found that various Central and South American governments had, by accepting underpriced tenders from the Telefunken Company for the erection and operation of radio-telegraph stations, assisted unwittingly the scheme for covering the world with German

wireless. A branch of the Telefunken Company also negotiated for the erection of wireless stations in the Philippine Islands, being prepared to contract for the work at such an unprofitable price that no ordinary fair tender would be accepted.

Among the wireless messages received by the Germans at Sayville and recorded by the "Journal" operators was one relating to the Lusitania. The German message ran: "From Berlin Foreign Office. To Botschaft, Washington—669. (44-W)—Welt nineteen-fifteen warne 175 29 1 stop 175 1 2 stop durch 662 2 4 stop 19 7 18 stop LIX 11 3 4 5 6." The deciphering of this message was an apparently impossible problem, as none of the known codes was used in it. But the "Journal" had an agent in the German embassy at Washington, who remembered that on the morning of April 29 Prince Hatzfeldt, of the embassy staff, had been hunting for a "New York World Almanac" for 1915. The investigators obtained the almanac, for which the clue was given by "Welt nineteen-fifteen"—the first two words of the message. Following the numbers as representing page, line, and word in the publication, they decoded the order from the Berlin Foreign Office to the German embassy at Washington. It ran:

Warne	—Warn	662 2 4	—Press
175 29 1	—Lusitania	19 7 18	—not
175 1 2	—Passengers	LIX 11 3 4 5 6.	—
durch	—through	Voyage across the Atlantic.	

The correctness of this decoding of the most secret wireless message sent across the Atlantic by the German government was proved on May 1, 1915, when there appeared in the "New York World" and the "New York Times" an advertisement by the German embassy warning travellers across the Atlantic from sailing in any ship flying the British flag. Mr. John Rathom and his lieutenant continued to intercept and decode the messages sent to the Sayville station. They became so dangerous to the Germans that a council was held in the offices of the Hamburg-Amerika line, in Broadway, at which Captain von Papen and his agent König advised that the offices of the "Journal" should be blown up. This measure was, however, combated by the naval attaché, Captain Boy-Ed. Mr. Rathom became aware of this interesting affair and of many others of larger national importance, and continued to listen for months to the operations of both the Sayville and Tuckerton wireless stations, making

discoveries on which were founded the "Journal's" startling exposures of German propaganda and intrigue.

Meanwhile, Mr. Charles Apgar was working at night with merely an amateur's instruments at Westfield. It was suspected that the Sayville operators were continually sending out messages of a military character, under cover of ordinary commercial dispatches in plain English and German. American naval censors stopped many communications on the ground that they were obviously not what they were intended to be.

For example, an attempt was made to send from Sayville an order to buy German cotton for an American firm. Other things were ordered from Germany which could not possibly be shipped to America. Such messages as these were stopped by the American authorities, but there continued a great stream of reasonable and apparently innocent words, from which the most expert and painstaking of American decoders could obtain no evidence of secret messages. But Mr. Apgar had fitted phonographic records to his receiving instrument. He prevented gaps, while substituting a fresh record for a filled one, by using two machines, and switching the receiver from one phonograph to the other when necessary. His records showed that the Germans employed curious variations in their methods of transmission.

It is usual in long-distance sending to repeat each word, so that if the first signal is faint the second will make all clear. For example, a message beginning with name and address such as: "Pr 3. W. 16 to, etc," would be sent thus: "Pr 3. Pr 3. W. 16 W. 16 to to, etc." But in the Sayville communications it was found that messages often would run: Pr. Pr. 3. Pr. 3. Sometimes a word would be repeated three times instead of once. Sometimes there would be other variations in sending, that became apparent in the phonographic records. Official American operators at Arlington and Fire Island always listened carefully to the German messages, yet merely read them as what they purported to be. With their minds centred on getting the meaning, they regarded the repetitions as being merely intended to make the symbols clear. But every night, between 11 p.m. and 2 a.m., Mr. Apgar made his phonographic records. In the morning he transcribed them and either delivered them personally to the New York police or sent them to the secret service officer in Washington. With the exception of the valve detector and the ordinary receiving telephones, all Mr. Apgar's

instruments were home-made. He had a 55-feet aerial on his house, and a 600-feet aerial running on neighbouring trees, and he could tune in up to 10,000-metre wavelengths. He numbered his cylinders and made a complete index of message numbers, and in the course of two weeks gave the American secret service such material that the Sayville wireless station was, in July, 1915, taken over by the United States government and operated only by American naval officers. As the Tuckerton station was already controlled by American authorities, the Germans in America were left practically without any means of wireless communication.

The result of the double exposures of the German use of wireless in the United States showed the weakness of the new instrument of communication in the hands of a blockaded people. The lack of secrecy consequent upon the immense radius of the electric waves, laid all the messages open to permanent record and to intense examination both by the Allies and interested neutrals. The Marconi Company had been using the phonographic method of recording before the war, and during hostilities it was employed in Great Britain. The best experts in Great Britain and France constantly worked at decoding the German far-flung wireless communications, including the millions of words sent out from the German stations. Therefore, in all military operations and in all political intrigues in foreign countries, directed by radio-telegraphy, the Germans and Austrians depended for safety on the secrecy of their codes.

Before Mr. Apgar began his phonographic recording, the American secret service was warned by the Allies that the Sayville messages were very suspicious. It was largely as a direct result of this warning that Mr. Apgar was asked to undertake the work he successfully carried out. German plots were discovered through the over-confident use of transatlantic wireless codes, and the revelations thus made had no small effect upon bringing the United States into the war. Leading newspapers, such as the "Journal" and "The World," published astounding information regarding the German use of wireless facilities, and directly aroused popular resentment before President Woodrow Wilson took any action.

On the other hand it must be noted that their system of propaganda in America, in Spain, and other countries within receiving range of the Nauern station was greatly aided by the

new means of direct and instant communication. When German cables were cut and all submarine telegraphs running through Allied territory were brought under censorship, there remained free for a time only the American cable to the Azores. But for the power obtained from wireless methods of telegraphy the Central empires would have been impotent to send the rapid and continual stream of reports necessary in maintaining their prestige among wavering neutral peoples. On particular occasions they would have been unable to forestall the Allies in their versions of military and naval actions, or counteract to some extent the natural and almost universal anger over their submarine operations against passenger and cargo steamers. Both with regard to their secret instructions to publicity agencies and to the news which they spread among neutrals, they would have been overwhelmed by the cabling advantages of the Allies had it not been for the development of electric-wave telegraphy.

As it was, the Germans had a voice that rang across the Atlantic, and when their stations in the United States were taken by the American government, a new system of communication was arranged by means of the American land lines to Mexico and long-distance stations in Mexico. This was countered by the American government establishing censorship over telegraphic communications with Mexico. Mexican intriguers then remained in touch with the Germans, as they had done from the outbreak of hostilities, but their power of communicating useful knowledge was considerably reduced. Alike in their period of vigilant neutrality and in their period of warfare the people of the United States were favoured by geographical position and by temporary difficulties in extending the range of radio-telegraphy. They were near the fringe of the carrying power of the Nauern station, so that German operators could seldom make themselves clearly heard in daytime, and were often in trouble during the better signalling conditions obtaining over the Atlantic at night time.

As a matter of fact, the experts of the Telefunken Company did not lead the way in devising means of extending the reach of wireless messages. When deprived by war of opportunities for adopting or adapting the latest refinements of the Marconi system, they proved distinctly inferior to the original inventor and his brilliant lieutenants. The British Company made

remarkable practical progress, reaching direct to Australia with its messages, and conducting a large amount of long-distance signalling, while working to protect ships against the submarine menace and helping generally in military wireless affairs. The Germans did not lack inventiveness and patience in experiment, as they showed when they employed the Marconi device of the Fleming valve to tap the telephone wires along the British, French and Russian fronts. They did not, however, achieve any great improvement in wireless transmission, such as might have extended their submarine operations across the Atlantic in a prolonged campaign against American shipping.

In the intense attacks upon Allied shipping round the British Isles, France, Spain, Portugal, and Italy, and throughout the Mediterranean, short-distance wireless signals were at times of remarkable service to the Germans. U-boats had communication with points on the Irish coast, with places on the Spanish shore, with some Greek islands and other lonely spots. Their under-water craft could approach at night, and, while completely invisible, send a short-range signal in code, asking if the way were clear. There was often no need for the agent on the shore to reply by wireless. A lighted candle in a window, the glow of a lantern, or some other simple, old-fashioned way of answering was usually sufficient. Thus, all that was required on land was a small, concealed aerial wire running to a receiver, such as an amateur could make. It was the U-boat's possession of wireless transmitting power that governed the situation.

Before the war the Germans arranged secret wireless stations in various countries. One of the most interesting of these hidden points of communication was the island of Bréhat, off the Breton coast, south of the Channel Isles. A German professor bought a mill on rising ground, and engaged in scientific work. Not only were preparations made for a wireless station, but the plan included the formation of a base for receiving a large German force by transport from Bremen and Hamburg, and overrunning northern Brittany. As the scheme depended upon the French navy being left unaided against the German navy, it failed from the outset, the Grand Fleet intervening.

The abundance of both private scientific and amateur wireless installations in the lands of the western Allies at the outbreak of war seemed to facilitate the erection of secret plant of small transmitting power. But the danger from spies working with

wireless soon became less than that of signalling over short distances by lights, and far less than the peril from enemy agents communicating by coded cables abroad, by advertisements in exported newspapers, by letters secretly carried in ships, or sent openly, with hidden meanings, through the post. The situation of secret transmitting plant was, of course, not very difficult to find ; motor-vans were sent out equipped with detecting apparatus of a similar type to that utilized in post-war years by the B.B.C.

At the time of its introduction this wireless transmission detecting device proved to be of immeasurable value, and there is no doubt that it went strongly against the use of radio-telegraphy for espionage purposes in Britain. Direction-finding stations were frequently engaged in locating the position of U-boats off the east coast, and they used the same system as that of the mobile detecting units which traced secret transmitters on land. The Germans experienced difficulty while navigating in the North Sea where the sun is often obscured and the opportunities for taking sights are infrequent.

One of the very few objects they had for checking their position was the old red, rusty North Hinder lightship which belonged to the Dutch, and which was moored about 52 miles from Felixstowe ; it was about an equal distance from Zeebrugge also. After negotiating the Straits of Dover safely, the submarines would pass near the lightship and then report to Germany by wireless. These signals would be picked up by the direction-finding station in England, and by the usual system of triangulation their position would be revealed. German submarines took great precaution when sending these signals. No aerial mast was up, as this would have attracted notice of the British air patrol. An auxiliary aerial was obtained by insulating the jumping wires, running from end to end of the vessel and over the conning-tower, which formed a protection against nets, hawsers, and mines.

The reduced visibility of the underwater craft did not save them. British operators made a chart showing the positions, dates, and times of day that German submarines were fixed by wireless. From this chart was made, between East Anglia and Holland, the Spider Web, in which the greatest of all defeats was inflicted upon U-boats, at the time when they were threatening to win the war by the destruction of shipping. The Spider

Web was based on the North Hinder light vessel. For 30 miles round, the water was divided into sectors by means of three imaginary circles and eight radial arms crossing and dividing the circles. Flying-boats from Felixstowe flew along the radial arms and patrolled the sectors, according to the information provided by the British direction finders. With only a few flying-boats acting as spiders in the Spider Web, 47 German submarines were sighted from April, 1917, to April, 1918, and at least 25 of them were bombed.

Zeppelins, rising from sheds at Wittmundshaven, Nordholz, and Tondern, conducted a regular daylight reconnaissance course across the Bight of Heligoland, and as far south as the Terschelling Bank. They watched British destroyers and light cruisers, and occasionally dropped bombs on Harwich submarines running on the surface on patrol. The lighter-than-air craft could outclimb a flying boat, and as their crews kept a sharp look-out, only surprise attacks by British aircraft were successful ; but the position, course, and speed of the Zeppelins were determined by British direction finders from the signals sent by the Zeppelins. The method of detection was the same as that used in the Spider Web. Even some of the slow-flying, heavily-laden Porte flying-boats then became able to trap and destroy the giant rigid airships. When fast aeroplanes were carried by capital and cruising British ships, sweeping towards the Bight of Heligoland, within overtaking distance of a " fixed " Zeppelin, there were frequent aerial engagements and encounters.

German airship control over the North Sea became increasingly difficult against the operations of the British direction finders and against the various kinds of aircraft to which they flashed their triangulated information. The airships had to use their own wireless as little as possible, for fear of giving indications leading to a surprise attack. The Zeppelin and Schütte-Lanz were struck with deadly effect at what had been their strongest point. They were originally the best of instruments for naval reconnaissance. They possessed, by reason of their great length, a powerful system of aerial wires, and afforded operators so steady a platform that during the first part of the war they were the only type of aircraft that could receive very long wavelength messages and themselves send out communications for hundreds of miles. In the latter part of 1917 a Zeppelin was flying over Khartum, on the way to German East

Africa, and taking direct orders from the Nauern station, near Berlin. In the battle of Jutland only a single British seaplane was employed in finding the German forces and sending wireless information to the admiral commanding the cruiser fleet. The lack of British seaplanes with wireless sets to work with the Grand Fleet was a remarkable defect in organization.

With its powerful wireless stations, and warships in instant touch with each other and with the Admiralty plant, the British navy greatly increased its power by increasing its flexibility and speed and scope of intercommunication. The fleet remained united, with Admiral Jellicoe in Scapa Flow, Admiral Beatty in the Firth of Forth, Admiral Hood off Dover, Admiral Bayly off Portland, and the submarines and destroyers of Harwich on observation work in the North Sea.

In its general naval use wireless was an added advantage to the stronger sea Power, permitting an apparently loose deployment of secondary forces, and concentration of the main battle divisions in the remote regions of the Orkney Islands or northern Irish coast. In the long-distance blockade of Germany the use of radio-telegraphy at least balanced the advantages acquired by the weaker fleet. Owing to the increased range and striking power of guns and torpedoes, to the menace of secretly and quickly laid minefields, and to the rapid organization of submarine ambushes, the German naval defence was of extraordinary strength, especially in the Bight of Heligoland.

To keep a close watch upon the German naval bases was impossible, and in the absence of instantaneous means of communication between widely separated yet cooperating naval forces at sea, the work of holding them in, while pressing them to come out, would have overtasked the ablest strategist. In misty weather, when the divided forces of the cruiser fleet and the Grand Fleet cooperated in a sweep into the Bight, under a low-hung roof of cloud, through which reconnoitring enemy airships could not see, no flag or lamp signalling would have served the main purpose. It was Marconi's invention that enabled light forces to work when required at a considerable distance from capital ships, and yet remain sensitive to the admiral's instructions, almost like fingers of an outstretched hand.

The new invention had indeed endowed the British fleet with a kind of electrical nervous system which more than doubled its mechanical striking strength. All the intricate machinery of

battle, which seemed to be growing beyond the personal control of a single man, was brought, when required, under the sway of one intellect. There was a personal concentration in the commander and his staff greater than that which Nelson or Napoleon had exercised in actions conducted in their actual field of vision. A new Napoleon could have recalled by wireless a new Grouchy, then, with practically complete knowledge of all that was happening, arranged clearly his next blow. In fleet actions the aerial became a very vulnerable part of the equipment, for a lucky shot might carry it away and put the ship for a time out of communication with the rest of the fleet.

The wireless apparatus of Admiral Beatty's flagship Lion was badly damaged by German gunners during the critical phase in the battle of Jutland. Continually the aerials had to be repaired under fire by a gallant and skilful expert, otherwise Admiral Beatty would have resembled a colonel of a regiment, made speechless and hard of hearing in the crisis of battle by a shell explosion, and left only with the power of gesticulation in a manœuvre requiring quick precision of direction. With flag signals the admiral might have been able to communicate with other ships in his command within telescopic range, as indeed was done. Yet in the fumes and smoke and mist of battle, flag-signalling was a matter of great difficulty. The fact that the submarine did not come to the surface until it was within close range of the ship it was attacking made the wireless mast a comparatively easy mark compared with what it was in the case of battleships fighting at a range of 10,000 yards or more.

The mast and Marconi cabin of merchant ships with wireless equipment were the first targets of gunners in German submarines. More than 800 Marconi operators were in merchantmen sunk by torpedo, gun fire, or mines. One hundred and eighty-two lost their lives, and 38 were severely injured. Most of them were young and inexperienced in the terrors of war, but there was already behind them the great tradition of keeping up wireless calls till the last possible moment in shipwreck and other general dangers of the sea. Under gun fire, in frail structures often without means of defence, the wireless men of the merchant service became, especially in the first period of submarine attack, the only hope of saving the ship. So long as their transmitting apparatus survived shell fire there was a fighting chance that the call for help would reach some armed

patrolling vessel, or attract reconnoitring aircraft with bombing tackle, and compel the enemy submarine to abandon its prey. There is a noble record of Marconi operators who lost their lives yet saved their ships. Equally noble is the long record of the young men who held to their work of calling for armed help, though no help came, and who died in their shattered cabins and went down to a sailor's grave. The heroes of the wireless room on liners and cargo boats may justly rank in romantic heroism with fighting airmen, and those gallant submarine men who kept only hostile armed vessels under attack, and at times met their death fighting against heavy odds.

Yet the wireless operator in the mercantile marine, during the period when merchantmen were neither armed nor convoyed, differed from the fighting airman and submarinist in that he had no source of any zest of battle. He and the crew he tried to save were unarmed men, attacked by a ruthless enemy, and possessing only the power of calling for help. Still at times there were some highly dramatic scenes of fighting endurance. A romantic wireless story in the early days of the war was afterwards told by a Marconi operator, Mr. Duncan Smith. At the outbreak of hostilities he was working in the steamship Mazatlan, belonging to F. Jebsen, who was a captain in the German naval reserve. In San Francisco the vessel was transferred to the Mexican flag, and a German wireless operator joined the ship, which left the American port with 200 tons of coal.

Smith was asked to inform Jebsen if a signalling call was heard with the letters "G. C. S. K." Jebsen, who was the worse for drink, boasted to the Marconi operator: "I may as well tell you right off that this coal is for the Leipzig!" Mr. Smith refused to help in finding and coaling the raiding enemy cruiser: but Jebsen and other officers threatened to shoot him and throw him overboard if he did not obey orders. He was told to explain the working of the Marconi apparatus to the German wireless man, who knew only the Telefunken system, and apparently did not know that very well. The Englishman took the German into the wireless room, but before so doing he tore out the wavelength markings and altered the whole system of tuning. This made the apparatus ineffective, and for three nights and two days the German operator vainly tried to call the Leipzig. When the enemy cruiser was met at an appointed rendezvous, Mr. Smith put the wireless apparatus back into working order,

so that skilled enemy naval operators should not be able to discover why they had received no calls. When the Leipzig steamed away, Mr. Smith again put his wireless out of gear, and the German operator afterwards tried to communicate again with the cruiser, but naturally failed to do so.

With the establishment of the convoy system of protection against submarine attack the wireless men in the mercantile marine became a vital link of communication between the protecting force and the units of protected vessels. The skippers had to keep formation in the manner of navigating lieutenants, and were without the years of practice of naval officers. Weather conditions were often too bad for flag or lamp signals, but most of the convoyed vessels were equipped with wireless, and it was easy to keep them together if there were no engine breakdowns or other trouble. It was the convoy system, with its wireless watch and wireless communications, that completed the active work of the wireless direction finders of U-boats and scouting Zeppelins, and saved the shipping of the Allies from being entirely destroyed. In wireless work connected with submarines the Germans began splendidly and ended badly. It was by wireless directions, sent out by an observing Zeppelin off the Netherlands coast, that Lieutenant Weddigen surprised the old British armoured cruisers Aboukir, Hogue, and Cressy.

Aerial warfare developed in a remarkable manner through the progress in wireless telegraphy and telephony. At the opening of hostilities reconnoitring and fire-controlling pilots of machines were little more than cavalrymen of the air. They flew over enemy forces, noted their movements, flew back to the nearest landing-place, found a telephone wire or motor wireless set, and communicated to General Henderson, who reported to Sir John French. In this slow, roundabout fashion were airmen's observations sent to headquarters. When engaged in assisting guns to get on a target, airmen swooped and dropped a smoke-bomb, giving warning to the men they marked out for attack as well as informing their own artillery. When, in the early part of 1915, transmitting wireless sets began to be made for general use in reconnaissance and fire control, the power of the artillery became more terrible. Observation balloons, with telephone wires, and forward observation officers, also with means of communication, could direct the opening bombardment, conduct counter-battery work on known or suspected positions, and

follow for a mile or so the advancing troops and the enemy's rallying and reinforced infantry.

This was not sufficient, under conditions obtaining on the western front, to breach the lines of defence. The strength of the attack was exhausted by lack of wide and clear knowledge of preparations for counter-attacks proceeding behind the hostile zones. When, as happened on either side, the defence survived till nightfall, fresh and mighty dispositions were made under cover of darkness, and observers for the attack in kite-balloons and new forward positions had to make a prolonged study of the new problems of the enemy's positions and arrangements. With expert wireless reconnaissance and gunnery observation carried on during action and extended to the enemy's rail-heads and motor-transport centres, the power of military machines began to give promise of cooperating in a decisive victory. The German staff under Falkenhayn was the first to make full use of an extraordinary number of heavy guns, directed on to distant targets by means of wireless messages from aeroplanes.

After the lesson at Verdun the French and British began to overtake the Germans in the wireless method of conducting warfare. In airmanship, expertness in working the signalling code became a matter of importance second only to skill in flying. Young officers usually worked as spotters for the guns, before being sent on long reconnoitring flights and rising to positions in fighting formations. The organizers of the Royal Air Force began to see new possibilities in electric-wave communications. A sound-proof headpiece was devised, with delicate microphone attachments for the ears, to enable airmen in flying machines to hear signals on short wavelengths. This improvement promised to bring aeroplane and seaplane wireless to a practical level of efficiency with large airship radio-telegraphy. When a man flying over enemy territory could be asked questions regarding the information he sent and given fresh instructions, gunnery work and staff work on the ground improved in flexibility.

This improvement, however, was not the main end for which the experts of the Royal Air Force were working. At their experimental station on Biggin Hill, in Kent, they laboured intensely at the problem of making small wireless telephone sets for use in both small and large flying machines. The transmission of speech by electric waves had been accomplished a considerable time before the outbreak of war. In 1908 Danish,

Italian, and French men of science had spoken by continuous wave systems across distances of hundreds of miles.

In September, 1915, the U.S.A. navy department's wireless engineers succeeded in speaking from Arlington, in Virginia, to Mare Island, in San Francisco Bay. This was a distance of 2,500 miles. But before the end of the month the American experimenters claimed that they had been able to carry speech for 4,000 miles to Pearl Harbour, Honolulu. Exceptionally favourable electrical conditions of the air were then required to transmit wireless speech for thousands of miles. Very powerful electric arcs or other wave-producing means were also needed for the continuous stream of long electric waves that carried the modulations of speech and re-created them by vibrations in the receiving instrument. All the elements of wireless telephony were worked out for the Royal Air Force researchers. In particular they inherited the Fleming valve and its circuits, to which was added a modification that enabled operators to hear messages in spite of the deafening noise of the engines. The problem was reduced to improvements and refinements for making a wireless telephone set suitable for use in the small space of an ordinary machine. Portability was increased, better methods of fitting were worked out, and with other practical devices airmen were given the power of speaking and listening to speech while in flight.

Under the Royal Air Force the work of the men on Biggin Hill was brought to a successful completion. Early in 1918 there were machines on the western front which at first never crossed the German lines. They contained the new telephone set, and pilots flying them worked only over the British lines, so that if one of the new machines fell it would not present the Germans with the key to the British command of the air. The radiophone had a moulding influence upon aerial tactics. A formation leader rose to a position similar to that of the commander of a destroyer flotilla. Being able to speak to every man flying under his command, he could direct an attack upon an enemy force.

The British commander-in-chief and his army leaders could conduct daring concentrations of armies without the enemy suspecting either the point of attack or the weight of it. In combination with a native gift for airmanship, excellent training, and a great output of good machines and engines and firing

gear, the British Flying Corps invention of a practical wireless telephone for flying machines ensured to the Royal Air Force that veritable mastery of the air which in the middle of the war had been regarded as an impossible attainment. The benefit of the new technique in aerial tactics extended to the British navy as well as to the British army.

Tactics in tank attacks were also improved by the invention of small and handy wireless sets, modified from those used on flying machines. When it became usual for tanks to storm into the German lines under a smoke-screen, created by special shell by the British artillery, success largely depended upon the tanks keeping in close touch with the infantry, artillery, aerial scouts, and, in a definite break-through, with the cavalry. Portable wireless of the telephonic kind, transmitting clear messages that could be heard through the noise of engines, permitted tank manœuvres generally to be carried out with terrible precision. Tanks could be piloted by airmen to machine gun nests, batteries could be ranged on hostile guns aiming at tanks, openings could be indicated to infantry, and the various commanders and staffs could be kept informed.

The use of wireless in directing infantry during the long period of trench warfare developed somewhat slowly. The defect of the electric-wave method was that messages had to be sent in some sort of cipher, causing delay in transmission and reading, and requiring quick coders and decoders at either end, with a frequent change of code to prevent enemy experts from reading every message. In 1918, when the Fleming valve was improved by the addition of a very sensitive "grid," German commanders, preparing to attack the British 3rd and 5th armies, gave orders that their own telephones should not be used for a distance of seven miles from the British lines. Telephone cables and telegraph lines also proved unreliable under the storms of shrapnel in the earliest trench battles. Armouring them made them heavier to draw over shell-holed ground, and digging protecting channels for them was slow work. Yet they continued in use, because the light portable wireless set for infantry signallers and for forward observation officers was long in being perfected. As military wireless improved for ordinary purposes, the detective direction finder improved with it. Thus operators, acting with hostile batteries, could triangulate the position of a wireless station on the other

side, and direct a sudden tempest of gas-shell about it. The position was not usually fixed with bull's-eye precision, but wireless men within range, who sent out fairly regular messages, could not expect their position to remain unknown.

When the battles of movement began again wireless stations, with portable instruments or travelling vehicles, increased in use. During the last great advance the British forward wireless was pushed onward against shell fire and machine gun fire to link the advanced troops with headquarters. There were times when all telegraph and telephone wires serving an attacking force were cut by German shell fire, and the entire traffic of communications was then conducted by the wireless station. The organization of central electrical supplies, with the connecting, charging and redistribution of heavy accumulators and the rapid removal of stations and their re-erection in more forward areas, were hard problems for forward wireless officers. Often they put up on ruined houses any kind of aerial that seemed to work, and operated in the cellar. Portable masts were carried and employed in the Somme region where a few buildings were left standing, but in the country beyond the Hindenburg line masts were not often needed, and more height was obtained by fixing the wire aerial to chimney and roofs. Soon after a village or hamlet was conquered the forward wireless usually occupied a cellar and decorated two gables with an aerial.

Unimportant messages were transmitted in clear language, but everything likely to afford the enemy information was put into cipher, with the necessary small delays at both ends. Wooded country was bad for wireless work. Torn and dense forest trees broke up the electric waves and made a resistance seriously limiting the range to which messages could be sent. Wherever possible a line of fairly open country was chosen as operating terrain, and changes had to be made continually in the direction of aerials so as to increase the strength of signals received and transmitted. In the first week of November, 1918, British wireless officers had reasons for judging that the main forces of the enemy were in flight. During the earlier stages of the final offensive the German stations worked most energetically, but in the last stage extremely few of them were to be heard working. Abandoned wireless material increased in quantity and quality, complete portable wireless sets being left intact and ready for use.

CHAPTER 33

The Attitude of Labour

In July, 1914, the Labour party was the weakest of the four political groups in the British House of Commons. At the last general election before the war (1910) the party secured 42 seats, and this was its strength in 1914. A former leader of organized labour, Mr. John Burns, sat in the Cabinet, but he had then no associations with the official Labour party. Moreover, early in August, he resigned, owing to disagreements with the policy pursued by his colleagues in those critical days. The Labour party in the House of Commons was likewise divided on this question. Its leader, Mr. Ramsay MacDonald, who was opposed to the whole policy of war with Germany, resigned, and was succeeded by Mr. Arthur Henderson. The party was thus split into two sections, and the fissure continued throughout the war period. Mr. Henderson and his followers, though criticizing the government on matters of detail, in general gave it steady support, this including valuable help in the recruiting campaign, while Mr. MacDonald and the others spoke regularly against it.

The Labour party, however, was by no means synonymous with the working classes, a much larger body and the only one to which the term labour can rightly be applied. As a whole the working classes supported the policy of war with Germany, and they did so in the most effective way possible. They provided 99 per cent of the rank and file of the fighting services and almost an equal proportion of the workers in the munition factories. Indeed, a moment's reflection will show that if the working classes had definitely and unitedly opposed the war it would, as far, at least, as Great Britain is concerned, have speedily come to an end. The strikes and other labour troubles narrated in this chapter are, therefore, not typical of the attitude of labour, properly so called, throughout the four years of the war, but are rather exceptional incidents in a wearisome period.

When in June, 1915, Mr. Asquith formed a Coalition Cabinet a seat in it was offered to Mr. Henderson. He became minister of education, and began the task of reconstructing the school

system of the country. Before his efforts had time to bear fruit, however, he was, in August, 1916, asked to devote himself entirely to advising the government on all matters connected with labour. For this purpose he took the office of paymaster general. From that he was, in November, transferred to the board of pensions, and would have been minister of pensions but for his appointment by Mr. Lloyd George (December, 1916) to be a member of the War Cabinet of four. In his stead Mr. G. N. Barnes became pensions minister. Mr. John Hodge was also included in the Cabinet as minister of labour. Among the under secretaries were Mr. G. H. Roberts and Mr. William Brace, while Mr. Stephen Walsh was appointed a lord of the treasury, all these being members of the Labour party.

On the whole, the representatives of labour proved themselves to be as capable in the business of administration as the members of the older political parties. After the revolution in Russia Mr. Henderson was sent to Petrograd to confer with the socialists who had taken over the government of the country. Before he left, Mr. Lloyd George was in favour of the proposal to hold a socialist conference at Stockholm, in which Germans and Austrians should sit with British, French, Italian, and neutral delegates. When Mr. Henderson returned to London he had become convinced that a conference of this character might have useful results, and he brought word that the Russian socialists were in favour of it. But by this time Mr. Lloyd George had altered his mind and was against the granting of passports for Stockholm. Therefore, when Mr. Henderson, at a Labour party conference (August, 1917) supported the sending of delegates from England to Stockholm, Mr. Lloyd George called upon him to resign. Mr. Henderson was succeeded in the War Cabinet by Mr. Barnes, Mr. Hodge becoming minister of pensions, Mr. Roberts, minister of labour, and Mr. G. H. Wardle, parliamentary secretary to the board of trade. By a vote of six to one a Labour party conference had approved of the taking of office by Labour M.P.s, and this approval was maintained until the summer of 1918, when the first conference of the Labour party under its new constitution decided, by a majority of two to one, that the party truce must cease.

Just after the armistice a special conference, by a vote of 2,117,000 against 810,000, called upon all the Labour members of the Coalition ministry to resign their offices. Mr. Barnes and

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A PROBLEM FOR PERISCOPES. The submarine danger caused the introduction of camouflage as an important factor in British naval operations. An ingenious method of painting and disguising ships made it extremely difficult for the submarine crews to discern through their periscopes the nature and course of vessels so disguised. An interesting specimen of the designer's art is H.M.S. London, looking like a harlequin ship in her weird warpaint.

SQUADRON OF BRITISH BATTLE-PLANES CROSSING ITALY'S MOUNTAIN FRONTIER

Mr. Roberts decided to leave the party and remain in the government. Others became independent members of Parliament. The most sharply regretted of the Labour ministers was Mr. Clynes, who, after doing excellent service first in connexion with soldiers' pensions and then at the ministry of food, as assistant to Lord Rhondda, himself became food controller, and continued, not only to deserve well of his country, but to retain the confidence and even the affection of his fellow-countrymen.

There was never at any period of the war a party openly opposed to carrying it on. There were small bodies of men—on the Clyde, for example—who tried to slow up the output of munitions. There were individuals who believed all war to be wicked. But among the labour unions and societies, among the socialist groups, among all the leaders of Labour and Socialism who occupied any place in the public eye, not one was found to denounce Britain as Liebknecht denounced Germany.

In Great Britain, meanwhile, there were at the outset, as there were in Germany, meetings of socialists to protest against war. One was held in Trafalgar-square, London, on Sunday, August 2, 1914, Mr. Keir Hardie, Mr. Hyndman, Mr. Ben Tillett, and Mr. Barnes being the principal orators. The first-named of these was the only one who continued to believe that the war was unnecessary. The other three became ardent supporters of it. Many at the outset announced that they shared the view of Mr. Ramsay MacDonald and Mr. Snowden, that Sir Edward Grey's diplomacy had been one of the chief causes of the war. Very few continued to support these two when the full extent of the German peril, as it had appeared to Sir Edward Grey, became plain.

Mr. Ramsay MacDonald's argument was that, by promising support to France and Russia, Sir Edward Grey had encouraged in France the fomenters of the desire for *la revanche*, and had put into the Russian war office and foreign office the spirit which made them support Serbia so strongly and mobilize at a moment when there seemed still a faint prospect of settling the Austro-Serbian quarrel by negotiation. This view he repeated at intervals, in spite of its unpopularity, and Mr. Bernard Shaw expressed a view very much like it in a pamphlet which he published very soon after war began. But it was never held by more than a few persons, and had no influence whatever upon the course of events.

On several subsequent occasions the possibility of securing a negotiated peace was discussed in the House of Commons, usually at the instance of the pacifist group of the Labour members, prominent among whom were Mr. Philip Snowden and Mr. C. P. Trevelyan. They put forward arguments similar to those mentioned above, and were answered by Mr. Asquith, Mr. Bonar Law, and other leaders of the Coalition government.

Upon the appearance of Lord Lansdowne's letter urging an endeavour to make such a peace (November, 1917) his proposal was strongly supported by the organs of Labour which took the pacifist view. But their views had no effect upon the mass of the nation. More importance was attached to the publication before the year 1917 ended of "Labour's War Aims." This document was drawn up for submission to a conference representing all the societies comprising the Labour party and the Trade Union Congress. The conference met on December 28, and by 3,3 votes to 12 adopted the memorandum. Mr. Henderson drew the loudest applause by his demand for "the destruction of militarism, not only in Germany, but universally." Mr. Havelock Wilson, who led the opposition to the war aims declaration, was a good deal in the public eye during the war as a leader of sailors and stokers.

Early in 1918 there began a series of inter-Allied labour conferences, called as a substitute for the abortive conference in Stockholm. To the war aims memorandum Germany sent no reply; Austria's response was not discouraging; Bulgarian socialists returned a favouring answer. This gave the pacifist wing little encouragement, and the jubilee meeting of the Trade Union Congress sent a unanimous message of congratulation to the British troops in the field. Twice in Parliament, in February and in June, there were further pacifist debates on the motion that the House of Commons regretted the decision "that the prosecution of military effort was the only immediate task of the government"; Mr. Snowden charged Mr. Balfour with not having read Dr. Hertling's and Count Czernin's replies to President Wilson's 14 points before he discussed them. Mr. Anderson said that "if the intelligence of our rulers had equalled the courage of our soldiers the war would have been over long before this." But the motion was lost by 28 against 150. On June 20 Mr. Snowden supported a motion asking for an assurance that no opportunity of settling the war by

agreement would be neglected, but gained little or no ground. The feeling against the pacifists seemed, indeed, to grow stronger. Twice during 1918 Mr. Ramsay MacDonald was shouted down at meetings, and once had his platform stormed. This feeling came out very strongly at the general election, when all the pacifists lost their seats.

The working classes as a whole were not greatly interested in these debates, but they were very much concerned about the rise in the cost of living. How great was the increase in this after six months of war was clearly brought out in the debate on the subject in the House of Commons during February, 1915. Wheat cost 72 per cent more than it had cost 12 months earlier; flour, 75 per cent; and sugar, 72 per cent. Coal showed an increase of only 15 per cent; and meat (British), of six per cent, while foreign meat had only risen by 12 per cent. Mr. Ferens, however, who opened the debate, mentioned that coal as well as bread cost half as much again in London as it had cost before the war, and that poor people were obliged to pay two shillings a hundredweight to street sellers.

Mr. Asquith, in replying to the demand that the government should "use every endeavour to prevent a continuance of the evil," pointed out that prices after the Franco-Prussian War were still higher (except for coal) than they were at this time, and said that hardships could not be avoided during war. Mr. Bonar Law agreed, but Mr. Clynes, for the Labour party, expressed disappointment, and urged that measures should be adopted to stop "contractors and dealers from exploiting the needs of the people." Mr. W. C. Anderson also made a vigorous attack upon the government for its inactivity. He said the purchasing power of the sovereign had dropped since 1900 to 15 shillings. The poor asked for bread, and Mr. Asquith merely talked at them the abstract principle of supply and demand. The government managed to get the resolution calling upon it to take action "talked out." From the Labour benches there were repeated proposals that the closure should be applied, but these the Speaker declined to accept. Prices continued to rise therefore; profiteering went on.

This was in large part the cause of the strikes which at one time seemed as if they might threaten seriously the vigour of Britain's conduct of the war. Already, in January, 1915, there had been trouble in the West Yorkshire coalmines. This was

settled by the men's demands being conceded "during the continuance of the war." The railwaymen had also put forward a claim to a war bonus. In August, 1914, they had agreed to postpone the discussion of their programme of better conditions; now they felt the pinch of high prices and asked for five shillings a week bonus all round. What they received was: Three shillings a week for those who earned under 30 shillings, and two shillings a week for those earning 30 shillings or more.

Early in March, 1915, there was a strike of engineers on Clydeside. They had asked for an increase of twopence an hour. The employers offered three farthings. After the men had been out for a short time the government ordered them to go back to work, promising that the dispute should at once be referred to arbitration. The strike committee recommended that the order should be obeyed, but made the suggestion that if the twopence asked for were not granted, the men should "ca' canny," or do as little work as they could. This provoked a good deal of indignation, and did much to prejudice the workers' cause, not only in this but in other disputes. The arbitration resulted in the men receiving only one penny an hour more for time work and 10 per cent for piece work. Dissatisfaction among the workers became more inflamed. Almost every day some new trouble perplexed and dismayed the public mind. Shipyard strikes threatened at Southampton and at Barrow were turned aside by agreements that the men should have four shillings a week increase instead of the five shillings which they had demanded.

So far the ordinary peace-time methods of bargaining had been followed, a process which involved both delays and irritation. When, on March 17, the Miners' Federation gave notice of a demand for an increase of 20 per cent and the prospect was opened of another long and acrimonious haggle with the possibility of a disastrous strike at the end of it, the public demand that the government should "do something" compelled Mr. Lloyd George, then chancellor of the exchequer, to call into conference the representatives of 35 trade unions and to put the danger of lessening the output of munitions before them. A few weeks before, at Bangor, Mr. Lloyd George had spoken earnestly on this theme. "This war," he said, "is not going to be fought mainly on the battlefields of Belgium and Poland. It is going to be fought in the workshops of France and Great Britain."

He urged that during the war the government ought to have power to settle all differences, and that workmen should never throw down their tools.

Within 10 days of this speech Mr. Lloyd George asked the House of Commons to give the government power to take over any factories suitable for the manufacture of munitions. A committee on production, appointed early in February, to report on the best means of securing a full output, had reported that both from the Admiralty and the War Office they had received assurances as to "the present and continuously increasing need for shells and fuses." It laid stress upon the need of "a rapid and continuous increase" in the production of all munitions.

This warning was repeated by Lord Kitchener, who told the House of Lords, "We have, unfortunately, found that the output is not only not equal to our needs, but does not fulfil our expectations." The matter, he said, was causing him very serious anxiety, and he wished all those engaged in the manufacture and supply of these stores to realize "that every round of ammunition was of the utmost importance." This appeal did not fail to move the trade union representatives in conference with Mr. Lloyd George. They agreed to recommend to their members "that there should in no case be any stoppage of work upon munitions and equipments of war." All disputes of demands for higher wages were to be freely discussed with employers, and, if no agreement was reached, to be submitted to arbitration. It was also settled that during the war, in view of the extreme urgency of the needs of the fighting forces, certain trade union practices, concerning division of work and refusal to work with non-unionists, and the admission into factories of half skilled, or of women's labour, should be relaxed.

Further steps in the direction of compulsory arbitration in labour disputes were taken when the Munitions of War Act was passed during the summer of 1915. It had been suggested that the proper way to secure the workers needed for the munitions factories, upon whose working the lives of our soldiers depended, was to apply compulsion. What Mr. Lloyd George proposed was to depend upon volunteers for mobile munition corps of skilled men, and Mr. Hodge, for the Labour party, pledged the trade unions to do everything in their power to make the plan a success. He also acquiesced in the suspension of the working classes' trade union rights. "It is better to give up such

privileges as we have than to let the Germans be successful and have no liberties at all." An amendment moved by Mr. Snowden, providing that rises in prices should always be taken into account when applications for higher wages were under discussion, was defeated.

The miners' demand for a 20 per cent increase, already mentioned, and the employers' offer of 10 per cent were submitted by agreement to Mr. Asquith for decision. He gave no decision, merely stating that he considered a case had been made out for an immediate advance, and leaving the amount of it to be arranged by district committees and boards. This kept the peace until July, 1915, when the South Wales miners demanded that their existing wages agreement should be superseded by a new one which gave higher rates of pay all round. Notice of this demand had been given in April, but the government paid no attention to the dispute until it became a source of serious danger. Mr. Runciman, as president of the board of trade, then made unavailing attempts to persuade the miners to reduce their terms, and having been told by a vote of 1,894 delegates against 1,037 that his efforts had come to naught, he issued a proclamation under the Munitions of War Act making it an offence to strike without referring the dispute to arbitration.

Of this proclamation the miners took no notice. By 88,950 votes to 47,450 they decided to stop work, and 200,000 were for a week idle (the cost of this was reckoned at £1,500,000). Mr. Lloyd George now went down to Wales to try to arrange a settlement, and after exertions which, he said, left him "sick at heart," he induced the miners to agree to Mr. Runciman's terms with some additions. The men went back to work, but at the end of August men and employers were again quarrelling as to the date at which the increased pay granted in July should begin. This time Mr. Lloyd George, Mr. Runciman, and Mr. Henderson had to be called in to settle the dispute.

At a conference of representatives of the mining industry Mr. Smillie, president of the Miners' Federation, said they would agree, if necessity were shown, to suspend the Eight Hours' Act and to reduce the age limit for boy labour, and to allow women to be employed in larger numbers. The necessity of producing more coal was clear from the falling off in the yield of 3,000,000 tons a month, due to the enlistment of 250,000 men from the pits. That further dilution of labour was necessary, this being the

phrase invented to cover the increased employment of women, boys, and unskilled men, was very seriously argued by Mr. Lloyd George in a speech which he made to 3,000 trade union officials and shop stewards at Glasgow towards the end of 1915.

No sooner had the South Wales coal crisis been finally got rid of in August, 1915, than there began again to be ominous signs of restlessness among railwaymen. The extra sums which they had received as war bonus were no longer, they complained, sufficient to meet increased prices. Now, after some delay, the executive council of the National Union of Railwaymen met the railway managers, and a further increase of pay was agreed to by them on behalf of the companies.

From that time until the early days of 1916 the controversy raged over the question whether compulsory military service should or should not be put in force. From the beginning of the war the Labour leaders, both in Parliament and throughout the country, had done a great deal to induce men to enlist of their own free will. For the most part they threw themselves into the recruiting campaign with patriotic energy. At a time when the supply of soldiers flagged, Mr. Henderson, as leader of the Labour party, joined Mr. Asquith and Mr. Bonar Law in the issue of an appeal to householders to state how many members of their households were willing to enlist; this appeal had very satisfactory results. But, in general, Labour was opposed to any measure of compulsion, and as the demand for this grew louder, so did the attitude of Labour become stiffer in resisting it. The Trade Union Congress, meeting at Bristol, in September, 1915, passed by a unanimous vote a resolution against "the sinister efforts of a section of the reactionary press in . . . attempting to foist on this country conscription, which always proves a burden to the workers and will divide the nation at a time when absolute unanimity is essential."

Whether this attitude reflected the mind of the working classes concerning conscription still seemed doubtful, however, and doubt was increased by the result of the Merthyr Tydfil election. The seat was vacant through the death of Mr. Keir Hardie, who had said very little during the war. There were two candidates, both Labour men, Mr. Winstone, put forward by the Labour party, and Mr. Stanton, who stood as an independent, and professed to be more patriotic than the "official" candidate. Mr. Stanton was elected with a majority of over 4,000.

On the other hand, the attitude of the workers represented at the conference of the Labour party about this time seemed to be indicated by the results of three divisions taken during the discussion of the military service bill. By a majority of 1,600,000 a protest was made against "any form of conscription." By a majority of 1,356,000 they registered their objection to the bill then before Parliament. Then by 649,000 votes against 614,000 they decided against agitating for the repeal of the bill after it became law. Thus they satisfied their consciences by registering their protests, and agreed to accept a law which they did not like, but which the majority of members of Parliament declared to be necessary for the safety of the commonwealth.

The only workers who offered any serious resistance to the new act and to the efforts being made to hasten the manufacture of munitions were a certain number on the Clyde. In March and April, 1916, a number of strikes broke out at munition works in that district. They were traced to the activities of a committee which aimed avowedly at stopping the production of supplies and forcing the government to repeal the military service acts. Six of the members of this committee were arrested and the trouble soon afterwards subsided. The Amalgamated Society of Engineers had no part in it; indeed, the society did all it could to prevent the strikes and forbade its members to leave work in order to be present at a meeting of protest against the arrests. In the debate on the incident in the House of Commons the Labour members took scarcely any part, thus tacitly expressing their disapproval of the tactics of the new force which had arisen in the ranks of labour—the shop stewards.

A long time passed, however, without any further manifestation of their force attracting public notice. The year 1916 was free from any further dangerous labour troubles until very near its close. There was no unemployment in the country, it was stated in the House of Commons in July, 1916. The work of the munition factories went on steadily and with ever increasing output, it was announced in August. The workers gave up their Whitsuntide holiday in order to keep up the supply of shells to the army, and they were promised two days instead of one in August as compensation.

When August came, however, the needs of the troops were still too urgent to permit safely of any stoppage of production. Sir Douglas Haig asked the nation to "give up any idea of a

general holiday until our goal had been reached." The meeting of employers and labour representatives to which this was addressed replied that it would recommend the postponement of all holidays involving interrupted production until they could be taken without prejudice to the military position. This recommendation was loyally accepted. At the same time, Mr. Henderson became chairman of a committee to suggest arrangements for letting workers take holidays in relays.

The close of 1916 was darkened by a strike of boilermakers at the port of Liverpool. The men had applied to the committee on production, a body appointed by the government, for a ten-shilling increase in their weekly wages to meet the rise in the cost of living. They were granted three shillings. They gave notice then that they would "down tools" on December 9. Their leaders urged them to apply for arbitration or to go into conference with the shipowners, but the men were in an obstinate temper and they ceased work. Mr. Hodge had at this time just been made minister of labour. He declined to deal with the matter until the strikers went back to work; as soon as they did that, he said, he would hear their case and act at once. The men stayed out in spite of this, and the next step taken by the government, in view of the delay to Admiralty work of the utmost national importance, was to announce its intention of exercising the special powers given to it by the acts relating to munition production and the defence of the realm. Upon this the men met and decided, by 827 votes to 74, to take up their tools again and, if necessary, do urgent work as overtime. Their grievances were then promptly inquired into and, as a result, their wages were raised.

The Labour party conference at Manchester in January, 1917, was not less emphatic than the Trade Union Congress had been in its acceptance of Mr. Wardle's view that no peace was possible until Germany had renounced her war aims and in rejecting the proposal that the International Socialist Bureau should be re-established. The shop stewards' movement on the Clyde was condemned by the older members of the Labour party with almost equal vigour. One of the engineers who had been arrested and deported from Glasgow appeared at the conference; Mr. Henderson told him that "he and his friends were a danger to both trade unionism and the nation," seeing that they had declined to listen to the officials of their own society, and had

done their best to obstruct the rapid production of war material. The party passed a resolution, however, demanding the immediate and unconditional return of the deported men.

The year 1917 saw a considerable tightening-up of war restrictions which caused a great deal of irritation and restless discontent. Food became scarcer and dearer. The necessity for regularly filling up the ranks of the army swept into the recruiting net more and more of the men of military age. The danger of any slackening in the supply of munitions to the troops kept the factory workers on the stretch from Monday to Saturday without any of the relaxations of peace time. War-weariness began to be noticeable, and one symptom of it was an increasing readiness to strike upon what often seemed to the general public slight provocation. There was a most unfortunate stoppage of work in the Barrow district engineering shops during the spring. The executive officials of the amalgamated society and other engineering unions twice tried to persuade the men to go back to work. Each time they were met by a refusal.

When the government threatened to enforce the Defence of the Realm Act unless work were resumed within 24 hours, the engineers proposed to nominate shop stewards to explain their case. Mr. Hodge said he would discuss the matter with the stewards if the men would begin work again at once. This they did, and the questions in dispute were settled by negotiation after a fortnight had been wasted by the strike.

A month later the engineers in South Lancashire came out, again in defiance of their unions. The causes of this strike were complicated. One was the unreadiness of employers to discuss matters with the men's representatives. Another was the dilution practised by introducing larger numbers of women. A third, and perhaps the principal cause, lay in a change made in the arrangements for exempting men from military service. The ministry of munitions had decided that workers should be exempted only if they were highly skilled, and therefore indispensable.

In the House of Commons, Mr. Anderson offered the nation a serious warning about labour unrest. It was beginning, he said, to amount to a revolutionary feeling, and, unless the government were very careful, they would bring the country to the verge of revolution. This was the first mention of the ominous word in public; it had been spoken often in private for

some months. An omnibus strike in London added to the depression of public feeling—but this was soon over. A cotton strike was threatened, but averted. Engineers in many other parts had followed the example of Lancashire, and the tension was not lessened by the refusal of the minister of munitions to negotiate with any but the "organized representatives" of labour, meaning the trade unions. He was obliged to withdraw from this position, and to receive members of the unofficial strike committee, as well as officials of the amalgamated society. In the meantime, seven of the strike leaders had been arrested and charged under the Defence of the Realm Act with impeding the production of war material. In the general settlement they were released and work was resumed.

Hard upon this followed the setting up of seven commissions throughout the country for the purpose of investigating labour unrest and making suggestions to the government. Each consisted of a representative of labour, an employer, and an impartial third party with a casting vote. Of greater significance was the report on the relations between employers and employed which assumed the greatest importance and was known as the Whitley Report, because Mr. J. H. Whitley, M.P., was chairman of the committee. This proposed the establishment in every large industry of a joint industrial council, which should settle general principles governing the conditions of employment, including wages, should endeavour to give the workpeople security of employment and earnings, and should encourage education, research, improvement of factory methods and machinery, and so on. District committees were also suggested, and works committees, representing both masters and men.

In August, 1917, the railway employees again became restive, and pressed anew their demand for an eight hours' day. The National Union of Railwaymen, with which the other railway unions had been amalgamated, opposed a strike, but the society was on the point of calling its members out when the government, by proclamation, forbade a strike. It was stated on the men's behalf, during the negotiations between the society and the board of trade, that "again and again engine drivers and firemen had to work 18 hours a day, and that for days together their hours ranged from 12 to 15." They did not ask for the rigid observance of an eight hours' day immediately, but they proposed that it should be introduced by degrees.

Sir A. Stanley, president of the board of trade, pledged the government to keep the railways under control after the war long enough to give the men opportunity to make their demand for shorter hours, and promised that such a demand should meet with "immediate and sympathetic consideration." That pledge was redeemed, and the eight hours' day arranged. In November another railway crisis arose, this time over a demand for a ten-shilling rise in weekly wages by the national union. The railway executive committee offered five shillings. Thereupon the railwaymen in the Liverpool district resolved to "go slow" in the expectation that traffic would become utterly disorganized, and that the ten-shilling increase would have to be granted. But a meeting of delegates from all parts of the country urged the Liverpool men to abandon their plan, and they consented. In the end the men got a six-shilling rise, to date back three weeks.

There were no strikes on a large scale during the early months of 1918. On the contrary the workers in the munition factories made special efforts to replace the heavy losses incurred in the disaster of March. So successful were their efforts that, on April 17, Mr. Winston Churchill, the minister of munitions, sent out to 2,500,000 workers a message of thanks from the king. He said: "There are now actually more serviceable guns, machine guns, and aeroplanes with the British armies in the field than there were on the eve of the German attack. The other supplies of all kinds are forthcoming in abundance." The minister had previously made a special reference to the replacement of the lost tanks.

A number of small disputes arose in the factories about this time concerning the 12½ per cent bonus on earnings which, having been granted to the workers in government factories, was demanded by others; but these were soon settled. In May came the first serious trouble of the year; in South Wales 52,000 coal miners absented themselves from work for 19 days in order to force the employers to recognize a local workers' committee. In August about 150,000 Yorkshire miners left work owing to a dispute about the hours of surfacemen. Soon, however, they returned, and the dispute was settled by arbitration.

Summer heat brought with it a good deal of irritation, more perhaps than usual because holidays were more difficult to obtain than in the years before the war. In July a series of strikes broke out in a number of munition centres of which may be mentioned

Birmingham, Manchester, Sheffield, Coventry, Newport, Oldham and Gateshead as well as smaller places such as Farnham and Gainsborough. Most of these disputes were composed, but the one at Coventry proved more difficult to handle. After consulting the prime minister the minister of munitions took the extreme step of withdrawing from the strikers the protection given to them against military service. The notice, which was issued on July 16 and displayed everywhere in Coventry, was as follows:

Owing to the scarcity of skilled labour in the country, created by the needs of the army and the grave emergency of the war, it became necessary some time ago to make sure that the skilled labour available was fairly shared among munition firms, and in some cases to place a limit on the number of skilled workers which particular employers or firms were entitled to engage. If this had not been done, employers, instead of making reasonable efforts to economize skilled labour so that what we have might be used to the best public advantage, would have been led to scramble against each other for skilled men regardless of the national interest. One firm would have been overcrowded with skilled men; another doing equally important war work would have been stopped for want of them. The Defence of the Realm Act, therefore, gives power to the government to limit the rights of employers to engage skilled labour beyond their proper needs, and the use of this power was approved by the War Cabinet and announced on June 8.

It is also the law that trade disputes in time of war shall be settled by arbitration without a stoppage of work. But the strike which is threatened at Coventry is not a trade dispute. It does not arise out of the ordinary relations of capital and labour. It cannot be settled by arbitration. It can only be regarded as an attempt to subvert and deflect the avowed policy of the state in time of national danger.

In consequence of this fact, the minister of munitions finds it necessary to state at the earliest moment that men who abandon their work in these circumstances will, by that very act, divest themselves of any protection against recruitment for the army if they are liable to serve. It is already hard that men between 40 and 50 should be called up for the army while younger men are left to earn high wages in the munition factories. Only the fact that these men are absolutely needed at their work has induced the nation reluctantly to put up with what is, from any other point of view, unfair. It would indeed be wrong that a young man who is given special protection from recruiting to enable him to do work of great importance should refuse to do that work and yet that his protection should continue.

The minister has, therefore, obtained the authority of the War Cabinet, not only to proceed with the utmost rigour of the law against all persons conspiring or inciting to such a cessation of work, but also to make it clear that the protection from military service of all or any men who cease work in these circumstances will be allowed to lapse immediately.

A few days of intense excitement followed. Speakers were imported into the town both by the strikers and by those who opposed their action. In a very short time, however, sanity prevailed, and by the night of Tuesday, July 23, just a week after the issue of the notice, Coventry was at work again.

September saw a railway strike. The men had asked for a 10s. additional war bonus, and had been granted 5s., which the railway directors considered to be enough—seeing that it brought the total war increase up to 30s. The danger of a general hold-up of railway traffic was clearly apparent to most of the men, and the strike was, therefore, confined to certain localities. It ended by the men going back unconditionally, but upon the understanding that their demand for another 5s. a week should be sympathetically considered. It may be noted here that the eight hours' day for railwaymen was conceded before the end of the year, and that during the war the wages paid to this class of labour rose from 47 to 102 millions sterling a year. Another strike in September was that of 40,000 textile workers in Lancashire and Cheshire. Their grievance was complicated, and an independent government inquiry was agreed to. Later in the year there was a more serious strike in the same trade and the same districts. As many as 100,000 cotton spinners and weavers struck for a 40 per cent increase on current pay. After nine days they went back with what amounted to a 30 per cent increase.

In general, then, it may be said that the attitude of the representatives of labour was a great help towards gaining the victory, and that the mass of workers stood by their country during the war with grit and self-sacrifice. A great deal was heard about the small number who were able to buy luxuries which had never been within their reach before. More should have been said about the very large number who laboured steadily at exhausting tasks for merely a living wage, and happily there is every reason to suppose that the country appreciated this.

CHAPTER 34

V.C. Heroes of the War—(V)

In four preceding chapters dealing with awards of the Victoria Cross, the period from August 4, 1914, to August 4, 1918, has been covered with as much detail as possible. The present chapter, which deals with winners of the V.C. from August 5, 1918, until the close of hostilities, therefore completes the story.

During this final period there were 154 grants of the Victoria Cross, although not all were won between August 4, 1918, and the conclusion of the armistice in the November following. A fair number were won earlier in that year, in those anxious March days when the British were fighting with their backs to the wall around St. Quentin and elsewhere, and some were earned even earlier than that. At least one was awarded for a deed performed in 1915, and they represented, as it were, the final payments on account of liabilities that went back to August, 1914, and the landing of the expeditionary force.

There are various ways in which the 154 awards can be classified, but the best seems to be to adopt the distinctions between the fighting forces of the British empire that are sanctioned by popular use. The three main divisions are, therefore, into navy, army and air force. Numerically the navy and air force are small, at least, as compared with the army, and in their case no further classification is necessary. But with the army it is otherwise, and two lines of classification, overlapping somewhat it may be, suggest themselves. The one is territorial, or national. The Canadians, the Australians, the New Zealanders, and other units from overseas constitute distinct branches of the one great army, and as such are entitled to distinct notice, thus leaving the way clear for the same method to be applied to those who, in the narrower sense, came from the Motherland.

Within these groups again some lines of demarcation may be useful; between England and Scotland and Ireland, for instance, or between Ontario and Quebec, or between Queensland and

Victoria. Finally, the persistence of regimental traditions, which is one of the most vitalizing influences at work in the British army, demands some word about the records of the various regiments in this respect, for they are each and all quite as proud of their roll of Victoria Crosses as they are of the faded colours that were borne forward at Badajoz or Inkerman.

The second method of classification groups men according to the arms with which they fight, and these arms are much more complicated now than they were half a century or less ago. It is no longer sufficient to speak of infantry, cavalry and artillery, or to divide the infantry into Guards and regiments of the line. The army has also its Engineers, and, of newer creation, its machine gunners and its Tank Corps. These and other units are worthy of a line to themselves. A further method of classification may occur to some, at least so far as the infantry are concerned. They may remember their being divided into battalions and brigades—some of Regulars, others of Territorials, and others of service men. In the early days of the war this line of demarcation was undoubtedly a clear one, and stood for real differences in training and experience, but as the struggle progressed it became less so.

The handful of regular soldiers, the trained men of Mons and Ypres, were destroyed in a few months, and the ranks were soon filled with men who were in effect civilians. Except as a matter of record, the earlier distinction vanished, and no useful purpose can be served by reviving it here. Finally, as far as these introductory remarks are concerned, we have classified a man as belonging to the unit with which he was serving when he won his V.C. Not infrequently it happened that a man was sent from one regiment to another without there being any permanent transfer of his name. Officially he was described as of his own regiment, attached to the other ; for instance, C. Wood, Yorkshire Regiment, attached East Surrey Regiment, was a Yorkshire soldier who, for some reason or other, had been drafted for the time being into the East Surreys.

To begin with a broad classification of the 154 men, it will surprise no one who followed, even superficially, the fighting of 1918, to learn that there were many awards to both Canadians and Australians. In their generous rivalry the Canadians had a slight advantage. They won 31 crosses against Australia's 25. But should an Australian remind us of his New

Zealand colleagues and their share in the name and exploits of Anzac, we can only reply that there are six of these in our list, and so the totals are exactly equal—surely something of a coincidence.

Of the Canadians nine came from Ontario, and eight from Quebec, a fine record for both, but especially perhaps for the latter province, with its large population of home-keeping Frenchmen. Of the others, seven were from Manitoba, two each from British Columbia and Saskatchewan, and one each from Nova Scotia and Alberta. The last was an engineer not attached to any particular province. The other parts of the empire, excluding Australia and New Zealand, were awarded three, two falling to India, and one to Newfoundland, making 65 Victoria Crosses for the soldiers from overseas.

For the British army proper the total is 73, of which all save 16 went to the infantry of the line. Of the 16 the Guards won five as did also the Engineers, the remaining six were given thus: three to the Machine Gun Corps, two to the Tank Corps, and one to the artillery. Those won by the infantrymen fell to men in almost every one of the regiments of the line, but the case of the Lancashire Fusiliers, with five crosses during the period, is specially notable. With the previous distinctions of this kind won by the Fusiliers in Gallipoli and elsewhere, this addition must surely place them very high on the list of winners of the cross. The Manchester Regiment won three in the same period, another distinction for Lancashire, and those that won two were the West Ridings, the York and Lancasters, the Northamptons, the Leinsters, the Sherwood Foresters, the Yorkshire Light Infantry, the Royal Scots, the Highland Light Infantry, the Northumberland Fusiliers, the South Wales Borderers, the Royal Inniskilling Fusiliers, the Royal Welsh Fusiliers and the Royal West Kents.

Again, if we divide the 57 infantrymen according to nationality, we find that nine belonged to Scottish regiments, seven to Irish, and four to Welsh ones. England was left therefore with 37. Of the five Guardsmen two belonged to the Grenadiers, two to the Coldstreams, and one to the Scots. In fairness to the Irish Guards it should be said that one of their number won the cross, but at the time he was serving with the Lancashire Fusiliers. He was Lieutenant Colonel J. N. Marshall, M.C., then commanding the 16th battalion. These

soldiers account for a total of 138, and 16 therefore remain. Of these 12 were earned by naval men, and the remaining four went to the Air Force.

The more detailed part of the story must begin with the navy, as the senior service. As just stated, 12 Victoria Crosses were awarded during the period to this service, although not all were for valorous deeds on the water. Three were given for gallantry shown at Ostend on the night of May 9, 1918, when the Vindictive was sunk between the harbour piers there. Lieutenant Geoffrey H. Drummond, R.N.V.R., was in command of motor-launch No. 254, and Lieutenant R. Bourke, D.S.O., of the same unit, in command of No. 276. Both followed the Vindictive into the harbour, and it was largely due to the skill and gallantry of these two officers that so many of her crew were saved. Drummond was wounded and his vessel damaged early in the fight, but nevertheless he laid her aside the Vindictive and took from her 40 men. Bourke was equally intrepid in refusing, although his launch was seriously damaged, to leave the harbour until he was convinced that no one was left there in jeopardy.

The third of the trio, Lieutenant V. A. G. Crutchley, D.S.C., known in days of peace as a county cricketer, took command of the Vindictive after his two superior officers had been disabled, the one killed and the other wounded, and was responsible for the final act of putting her in position. He then, satisfied that no one was left on the Vindictive, took charge of the motor-launch which rescued him, and by his tremendous exertions kept this damaged vessel afloat until H.M.S. Warwick found her in a sinking condition.

Ostend reminds one of the earlier attempts made to close that port and also Zeebrugge, and the record before us contains two awards for gallantry in the latter operation. Both went to men who had given the final proofs of their valour, for both were killed while leading their men to attacks which meant almost certain death to those in front. Lieutenant Commanders G. N. Bradford and A. L. Harrison, the latter known to thousands as an international footballer, were in command of storming parties, the one from Iris II and the other from Vindictive. They got on to the mole after gigantic difficulties, and there Bradford was killed while making fast the anchor, an operation on which the whole enterprise, so far at least as his own ship was concerned, depended. Harrison lived somewhat longer.

Once on the mole he led his men in a wild rush towards the guns that were commanding the mole's length, only to fall dead at their feet.

Lieutenant H. Auten, D.S.C., of the R.N.R., won his V.C. when in command of H.M.S. Stock Force. On July 30, 1918, she was torpedoed by an enemy submarine. Serious damage was done, practically everything, save only the nerves of the captain and his crew, being injured. As arranged previously, however, a panic-party left the ship in great haste, and began to row wildly about in their little boat. This manœuvre tempted the German submarine to come nearer, and when she was near enough Auten let fly with his two available guns. The shots took effect, and at length the submarine was sunk. The Stock Force was badly damaged, but she was kept afloat for some little time, and only sank when her crew were being rescued by torpedo boats. This was described as "one of the finest examples of coolness, discipline and good organization in the history of Q ships."

Two naval V.C.'s belonged to the R.N.V.R., and their deeds are more akin to those of the soldiers. However, their connexion with the navy is too close to be interfered with, and their deeds must certainly come here. On October 31, 1918, when the name of Chief Petty Officer George Prowse was brought to public notice, it was only stated in vague terms how, during an advance, he collected some men from a disorganized section and led them against a strong post. Afterwards he did a similar feat, on each occasion capturing the guns which were holding up the British advance, and bringing back prisoners. Later it was stated that Prowse belonged to the Drake battalion of the R.N.D., and that his superb courage, as it was called, was displayed at Pronville on September 2, 1918.

To the same battalion belonged another hero, Commander D. M. W. Beak, D.S.O., M.C. On August 25, 1918, he was fighting in the same neighbourhood as Prowse, and found himself suddenly in command, not of a battalion, but of a brigade. Four days earlier he had led his own men in a very successful attack on four hostile positions, and he was equally cool and alert when faced with a greater responsibility. He reorganized the brigade, led the men forward, and, when the rush was checked, dashed on and broke up the nest of machine guns that was hindering the advance. Early in September he gave another

example of his powers as a leader, and contributed "very materially" to the success of the division in these operations. The remaining three Victoria Crosses were awarded to the R.N.R. They were announced together on May 24, 1919, but were for deeds widely separated in time and place, although alike as examples of the cool courage that British seamen invariably show in times of danger. All were in command of ships, one a submarine, one a transport, and one an ordinary steamer.

On July 4, 1915, Lieutenant F. Parslow, R.N.R., in command of the Anglo-Californian, a horse transport, was told that a submarine was in sight, and soon proof of this arrived in the form of shots. For a time Parslow kept in front of his enemy, and it was only when the latter was upon him that he prepared to obey the order to put the crew in boats and abandon the ship. Just at that moment, however, he received a message by wireless saying that a destroyer was on the way to help him, so he remained on the bridge, and under heavy fire got his ship moving again. While directing this he was killed, but the destroyer arrived in time to save the ship and her cargo. For this the credit was rightly given to Parslow.

The next case was that of Lieutenant A. B. Smith, also R.N.R. On March 10, 1917, when in command of the Otaki, he met the German raider Moewe. He had one 4.7 in. gun against the raider's four heavier ones, but when ordered to stop he showed fight rather than obey. The unequal duel lasted for about 20 minutes. Smith went down with colours flying in the Otaki, and the Germans were moved to describe his action as "a duel as gallant as naval history can relate."

It is right and proper to find the name of a submarine commander among our heroes. Early in 1918, Lieutenant Commander G. S. White, in charge of E14, was sent off from Mudros to attack the Goeben, then aground in the Dardanelles. In this particular matter he had no success, and when returning his ship was badly damaged, so badly in fact that she was obliged to travel on the surface. This brought her under constant fire from the Turkish forts, but White directed her course until he was killed, his last thought being to give his men a chance of escape by running her ashore.

The last of the naval honours was against the Bolshevists on June 17, 1919, and, although earned after the armistice, should find a place here. Lieutenant A. W. S. Agar, R.N., operating

in the Baltic, got his vessel through a screen of destroyers, successfully attacked the cruiser Oleg, and got back again under heavy fire from both the land forts and the destroyers.

The deeds of the soldiers should be related next, but before turning to them we may be allowed to interpolate those of the newest service—four airmen. Captain F. M. F. West, M.C., was flying over the German lines when seven hostile machines turned upon him ; on tackling them his leg was soon badly hit by an explosive bullet. However, he brought his machine safely into the British lines, where he fainted; but, on recovering consciousness, he wrote his report. Captain A. W. Beauchamp-Proctor was a prince among air fighters, as the long record of his deeds, issued on November 30, 1918, amply proved. Having won the D.S.O., D.F.C., M.C. and bar, he outdid his earlier deeds in the two months between August 8 and October 8, 1918. Therein he was victor in 26 combats, and his record was 54 foes defeated, 22 enemy machines and 16 kite-balloons destroyed, in addition to 16 driven down out of control. For months his work was "almost unsurpassed in its brilliancy."

Captain W. G. Barker had won a batch of decorations very like those of Beauchamp-Proctor when he flew out in the morning of October 27, 1918. Having disposed of two German machines, he found himself surrounded by others, and in the ensuing fight was rendered unconscious, obviously losing thereby control of his machine. However, he recovered his senses and drove down another foe, only to be put again *hors de combat* by a serious injury to his elbow. Yet, strange to say, he went successfully through another combat, and finally crashed down in the British lines. He had disposed of four enemy machines, making his total 50.

Captain Edward Mannock's record was of the same kind. He had won the D.S.O. and two bars and the M.C. and one bar when he was killed in France on June 26, 1918. His fighting career had been one long catalogue of victories, and as 50 of these were on record he was awarded, posthumously, the Victoria Cross in July, 1919, not for one or two deeds only, but "in recognition of bravery of the first order in aerial combat."

Having now reached the soldiers, a beginning may be made with the Guards. The Guards had one of their great days on September 27, 1918. The division was advancing, and in front of it was the Canal du Nord. The 3rd brigade was led by

the 1st battalion Grenadier Guards, and in command of this was Viscount Gort, an Irish peer, and a soldier who had already earned the D.S.O. and M.C. Under heavy fire he led up his men, but there was some unexpected obstacle to their progress. While dealing with this Lord Gort was twice wounded, but he directed the final attack and organized the captured position before collapsing from his wounds.

Not far away was the 1st battalion of the Coldstreamers, and this, too, met with very severe resistance on reaching the bank of the canal. Machine guns, from one point of vantage especially, were doing very deadly work, so Captain C. H. Frisby, with three men who volunteered to follow him, rushed into the canal, got across it, and silenced the guns. Had this not been done, it is practically certain that the whole advance in this area would have been held up. Frisby was wounded, but he remained on duty; not only so, but he went to the aid of a neighbouring company that had lost all its officers and encouraged the men to beat back a strong attack. One of the three who followed Frisby was Lance Corporal T. N. Jackson, and after the first exploit he led the way into a German trench. Later in the day he was killed, and his cross, like that of so many others, was a posthumous one.

Another Grenadier and a Scots Guard remain to complete the five. The Grenadier was Private W. E. Holmes, of the 2nd battalion, who was killed while saving life. He carried several wounded men out of danger, but his last errand of mercy was fatal. This happened on October 9, 1918. The Scot was Lance Sergeant H. B. Wood, of the 2nd battalion, and his cross was won four days later. His company was then in the village of St. Python, trying to clear it of the enemy, and to win its way across the river Selle. The opposition was strong, but Wood was equal to the occasion. He himself lay down and dealt with the German snipers, while those under his orders worked their way forward. This done, he showed a like skill in keeping back the enemy, and it was recorded that the success of the day's operations was largely due to his "gallant conduct and initiative."

The five crosses won by the Engineers were all given for work done in the final advance, when rivers were bridged in hot haste, and the supreme consideration was to make a way for the men and guns to press hard on the retreating Germans. In such

days the Engineers were invaluable, and never more so than in October and November, 1918, when Archibald, Cloutman, Findlay, McPhie and Waters earned immortal fame.

In point of time the first of the five was Corporal James McPhie, of Edinburgh. On October 14 he was with some sappers whose task was to keep in being a cork-float bridge across the Canal de la Sensée. It was under fire, and was damaged so much that, when the infantry began to cross, it buckled up and began to break. Daylight was coming when McPhie dashed into the water and tried to make the bridge secure. He was unable to do this, but, realizing the vital necessity of keeping touch with his few comrades on the other side of the canal, he again led the way across the frail and tossing structure, and this time was killed. However, the patrol on the other side was saved, thanks entirely to McPhie.

Major A. H. S. Waters, D.S.O., M.C., was one of the three Engineers who won the cross on November 4. He was on that day hard at work with his company bridging the Oise-Sambre canal. Heavy fire was directed against the Engineers, and the operation was only completed after Waters himself had gone forward, all his subordinates having been killed or wounded, and taken charge of the surviving men, the group being held up by cork floats. The success was "entirely due" to this example, for the officer and his assistants were fired at from point-blank range, and their escape was almost a miracle.

On the same day Major George de C. E. Findlay, M.C., was building or repairing bridges over the same canal. One of these was at the lock near Catillon, and here, too, the enemy's fire was very accurate and severe. Findlay, however, although wounded, got a bridge into position and was the first to cross it. Like Waters, his example was most valuable.

The third of this trio was a sapper, Adam Archibald, of Leith. He was one of those who assisted Waters, working while standing on cork floats at building a bridge over the canal. This example, too, was of supreme value, and on the completion of his task he collapsed from gas poisoning, a bare statement that reveals another danger faced by these men.

Two days later Major B. McK. Cloutman, M.C., of the 59th field company, R.E., saved a bridge, for the time being at least, from destruction. It was at Pont-sur-Sambre, and the retreating enemy had made all preparations for blowing it up at

the right moment. However, quite alone, Cloutman swam out, and under heavy fire removed the leads from the charges. He returned safely.

Another five on the list may be made by grouping together three machine gunners and two tank officers. Lieutenant William A. White was three times responsible for dealing successfully with hostile machine guns. Alone he shot three gunners and took the gun; shot five gunners and took the gun; he rushed an enemy position with a few assistants, and finally consolidated the captured position and severely damaged the enemy. This was done at Gouzeaucourt on September 18, 1918.

The next machine gunner was Lieutenant D. C. MacGregor, a Territorial officer of the Royal Scots, who had joined the Machine Gun Corps. At Hoogmolen, on October 22, he found himself in a position of difficulty and danger. In front of him was a bare stretch of ground swept by the German guns, but, nothing daunted, he got his men and his weapons forward, driving the horses across 600 yards and getting the battery into action. The advance was resumed, but an hour later MacGregor was killed.

In a very long statement the War Office, on September 5, 1919, gave an account of the deeds that won the cross for Lieutenant A. E. Ker, of the 61st battalion Machine Gun Corps, and previously a Gordon Highlander. He was at St. Quentin on March 21, 1918, the place and the day of the gravest danger, for there, as we all know, the Germans got through. But in one place Ker, with a Vickers gun, held up the attack; and when this gun had been destroyed and the enemy was all around him, he and a few companions used their revolvers to beat back bayonet attacks. The wounded were collected in a small shelter, and then Ker and his men fought on, once taking from the Germans a rifle and some ammunition after a hand-to-hand encounter. For three hours the attacks of 500 men were held up by a few Britons.

The two tank officers received their award on the same day, October 30, 1918. On September 2, Lieutenant Colonel R. A. West, D.S.O., M.C., formerly of the North Irish Horse, was in charge of a battalion of light tanks, which were waiting for the moment to advance. West went forward to find out the position, and came up with an infantry battalion in sore straits. At once he took charge of this, for most of its officers were down. He reorganized the position, and to give the shaken men

confidence went up and down in front of them, crying out: "Stick it, men," and "for God's sake put up a good fight." He could hardly escape being killed, and in a few minutes his gallant life ended. But the hostile attack was defeated.

Lieutenant C. H. Sewell was in charge of some whippet tanks at Fremicourt on August 29, 1918. Under fire he got out of his own machine to rescue the crew of one that had overturned—and this he did, unaided, by digging a way to the door which was blocked by a shellhole. Later he rescued a man who was lying wounded, and he was killed while assisting another.

The artilleryman in the list may fitly be mentioned here. He was Lieutenant R. V. Gorle, R.F.A., who at Ledeghem on October 1, 1918, took his gun into action in most exposed positions on four separate occasions, and afterwards galloped it in front of the leading infantry and knocked out some German machine guns.

The record of the infantry may well begin with a group of five, those winners of the V.C. who belonged to the Lancashire Fusiliers, and we will follow them with a kindred group of the same size—three Manchesters and two men of the York and Lancaster Regiment.

Lance Sergeant E. Smith, D.C.M., of the 1/5th battalion Lancashire Fusiliers, led his platoon to the capture of a machine gun post, and then went off to the assistance of another platoon, where again he showed himself a resourceful leader. Next day he was to the fore in the critical operation of restoring a portion of the line, and his courage and example on August 21, 22 and 23, 1918, were deservedly rewarded by a V.C. In the same list of awards was the name of another Fusilier, Sergeant H. J. Colley, who won the cross on the 28th. He, too, was in charge of a platoon, and it was owing to his courage and resource at Martinpuich that a dangerous attack was beaten back. Less fortunate than Smith, he was so badly wounded that he died.

Private Frank Lester, who, like Colley, belonged to the 10th battalion, met his death in the noblest fashion on October 12, 1918. The village of Neuvilly was being cleared by the British, and at one time the only chance of life was to keep to the houses. A clever sniper was steadily picking off the British soldiers, so Lester dashed into the street and shot him. Almost at once he fell himself mortally wounded, for German machine guns were everywhere.

Sergeant James Clarke, of the 15th battalion, a Rochdale man, comes next. On November 2, 1918, he was commanding a platoon which was held up by machine gun fire. He dashed forward, seized the guns, and made the crew follow him as prisoners. But this was by no means all. Against some more guns he led a tank, and two days later he was equally successful with a Lewis gun which he got into action very effectively, enabling his company to resume their advance.

The last of the five Fusiliers is an officer, and his description, Lieutenant (Acting Lieutenant Colonel), shows how severe was the fighting that caused such rapid promotion in those November days. He, John N. Marshall, transferred from the Irish Guards, was leading his battalion, the 16th, in the attack on the Sambre-Oise canal near Catillon on November 4, 1918, an operation which has been already mentioned in connexion with the Engineers. The bridge by which the Fusiliers were to cross was broken, so Marshall organized and led forward parties of volunteers to repair it. These were quickly killed or wounded, but he called for others, and, standing exposed on the bank, encouraged and assisted them at their work. So far he was unhurt, but he was killed when dashing across the repaired structure.

The first of the three Manchester names carries one back from the glad days of November to the dark ones of the previous March, for it was on March 21 and near St. Quentin that Lieutenant Colonel W. Elstob, D.S.O., M.C., leading the 16th Manchesters, gave his life for the cause. He was at Manchester redoubt, and the Germans were coming on in great force, so he dashed from point to point among his men, at one time beating back alone an attack of bombers, at another bringing up ammunition, and all the time assisting the defence in every possible way. The attack developed, and soon the redoubt was quite surrounded, but Elstob assured the general in command of the brigade that his men would fight to the last. "Here we fight and here we die," said he, and, as good as his word, he was killed when a final assault swept into the position.

Alfred Wilkinson was a private of the Manchesters, who won the cross for his gallantry in taking a message. When he volunteered, five men had been killed in attempts to do so, but happily he, although in extreme danger, completed his hazardous journey in safety. This was October 20, and on November 4 Second Lieutenant James Kirk, of the 2nd battalion, won the

cross, like Elstob, at the price of his life, for working a Lewis gun from a raft on the Oise canal. He was only 10 yards from the enemy, and his object was to protect a party who were working at making a bridge. He continued his daring work until killed.

The York and Lancaster heroes were both sergeants—F. C. Riggs and J. B. Daykins, the former belonging to the 6th battalion, and the latter to the 2/4th. On October 1, 1918, near Epinoy, Riggs led his platoon to the capture of several guns and 50 prisoners, being killed in a later enemy attack. Daykins, like so many, was successful in rushing a machine gun, taking a number of prisoners and saving many casualties to his own side. He fortunately survived.

We may now deal with those other English regiments that won two Victoria Crosses each during the period. Of these there are six, making a group of 12 heroes : Northumberland Fusiliers, West Ridings, Yorkshire Light Infantry, Sherwood Foresters, Northamptons, and Royal West Kents.

The Northumberland Fusiliers were an officer and a private. The officer, Lieutenant James Johnson, belonged to the 36th battalion, which indicates how great a number of Fusiliers were in the field, and the private, Wilfred Wood, won his cross in Italy, whither the 10th battalion went to assist the Italians against Austria. On October 14, 1918, Johnson was constant in bringing in wounded men under heavy fire, while Wood, working a Lewis gun at Casa Van on October 28, 1918, compelled 300 of the enemy to surrender in two groups.

An officer and a private also fill the bill for the West Ridings. Second Lieutenant J. P. Huffam, of the 2nd battalion, twice led attacks against hostile machine guns, and on four hard days was constantly to the front with gallant deeds. Henry Tandey, who had already won the D.C.M. and the M.M., was at Marcoing on September 28, and his deeds there were truly remarkable, even in the Great War. As a preliminary he knocked out a machine gun, and under heavy fire restored a plank bridge, and then came his crowning deed. He and eight other men were surrounded by Germans and the position was hopeless, except to Tandey. He called for a bayonet charge and led it—with the unexpected result that 37 of the enemy were driven on to the remainder of his company and became prisoners.

Sergeant Lawrence Calvert, M.M., Yorkshire Light Infantry, won the cross on September 12, 1918. He belonged to the 5th

battalion, and at Havrincourt he dashed forward alone against two machine guns, killed the crew, and so enabled the advance to proceed. Lieutenant Colonel Harry Greenwood, D.S.O., M.C., of the 9th battalion, did like deeds on October 23 at Ovillers, and on two days of hard fighting led his battalion with remarkable courage. Once he was almost surrounded, but he took his men forward, and the result was 150 prisoners and some guns, and at other times on the two days his skilful and bold handling was productive of most important results.

The two Sherwood Foresters on the list won their crosses at almost the same time, and the awards appeared on the same day; both were among the 32 honours which were gazetted on December 14, 1918. Lieutenant Colonel B. W. Vann was a remarkable man. He was a clergyman, but had given up his work to fight, and constant acts of courage had brought him to the command of his battalion—the 1/6th. On September 29, 1918, he led this with great skill across the Canal du Nord, but soon the advance was stopped. Vann thereupon rushed up to the firing line, and by his prompt action and absolute contempt for danger changed the whole situation. The line swept forward. Later, this officer rushed a field gun quite alone, but on October 3, while leading another attack, he was killed. Sergeant W. H. Johnson was a Territorial in the 1/5th battalion, and he won his cross on the day and place of Vann's death, October 3, at Ramicourt. The deeds were putting machine guns out of action, coming back with trophies in the shape of both guns and men. He was severely wounded.

The two Northamptons received their awards on the same day, and again one was an officer and the other in the ranks. Again one was killed and the other not, but this time it was the man, not the officer, who lost his life. Lance Corporal A. L. Lewis, of the 6th battalion, was at Rosny on September 18, 1918, and there he crawled out alone, and came back with prisoners, men who had been working two deadly machine guns. Three days later he was killed, having again shown "great powers of command." Lieutenant F. W. Hedges was serving with the same battalion about a month later, although he was really an officer of the Bedfords. He led forward his company with extraordinary success, and when it was stopped went on with only one follower and captured six machine guns and 14 prisoners. The great Allied advance

was just beginning when Sergeant T. J. Harris, described as late Royal West Kent Regiment, won his cross. On August 9, 1918, he was with the 6th battalion at Morlancourt, but all that need be said is that he was another of those who successfully tackled hostile machine guns. Lieutenant D. J. Dean, of the 8th battalion, had rather a different task. From September 24 to 26, 1918, he held an advance post near Lens, one that was not very secure, but under his leadership the enemy was five times driven back, and by his "valour, leadership and devotion to duty" the position was saved.

Scotland, Ireland and Wales had each two regiments with two recipients of the cross. Lieutenant D. L. MacIntyre was with the 1/6th Highland Light Infantry at Croisilles in August, 1918, when the battalion was in a position of some danger. He was acting as adjutant and was constantly in the firing line; at one time he was in command of it during an attack, and his courage was superbly shown when getting his force through entanglements of various kinds. Later he dealt, as did many others, with hostile machine guns, raiding three pill-boxes in a redoubt, and singlehanded capturing a machine gun.

About the same time, or rather a little later, something was said in the press about a certain non-commissioned officer who for two days held on to an isolated post. Later it turned out that this feat was performed by Corporal D. F. Hunter, of the Highland Light Infantry. Without food or water, subject not only to the fire of the enemy but to the British barrage also, he kept his post, showing, as we are told, "a determination, fortitude, and endurance" beyond all praise.

On August 23, 1918, Private Hugh McIver, of the 2nd Royal Scots, was serving as a runner to his company, then near Courcelles-le-Comte. Seeing an enemy scout, he chased him into a machine gun post, where he had a fight with a number of Germans; this ended in McIver killing six and capturing 20, with two guns, and the advance of his company being resumed. Later he stopped a tank from firing by error on its own men, thus saving many lives, but later he lost his own. On October 15 Corporal R. E. Elcock, M.M., 11th battalion, then commanding a Lewis gun team, rushed his gun up at a critical moment, and by its prompt action "saved the whole attack from being held up." Later he rushed a German machine gun and captured the crew.

Of the two Irish units we will take the juniors, the Leinsters, first. Sergeant John O'Niell, M.M., and Martin Moffat, a private from Sligo, were both with the 2nd battalion when it was taking part in the great advance on October 14, 1918. O'Niell's company was checked by hostile fire, so with 11 men the sergeant dashed forward and captured four field guns, two machine guns and 16 Germans. Six days later, with only one man, he rushed a machine gun, putting about 100 of the enemy to flight, and altogether he showed "the most remarkable courage and powers of leadership." Moffat was crossing the open with five comrades, when they found themselves suddenly fired at from a house close by. Disregarding the bullets he dashed to it with some bombs, got round to the back door, and alone entered the building. The sight of this intrepid Irishman and his bombs was too much for the enemy, and, two having been killed, the remaining 30 surrendered.

At Terhand, in September, 1918, was the 2nd battalion of that famous regiment the Inniskilling Fusiliers, and with it was Corporal E. Seaman. The advance was held up by hostile machine guns, so he went forward alone with his Lewis gun and destroyed the obstacle. He returned with two German machine guns and 12 prisoners, and later repeated the feat, capturing another gun under heavy fire. It was entirely due to his gallant conduct that the company's further progress was possible, but unfortunately he was killed during the movement. The story of Private Norman Harvey, of the 1st battalion, is very similar, save that he lived to receive the cross. On October 25, 1918, he rushed forward alone against machine guns, broke up the nest, and scattered the men in charge. He, too, repeated the feat a little later, and also obtained valuable information, the fruits of a night journey into the enemy's lines.

In the army, North Wales is represented by the Royal Welsh Fusiliers, and that fine regiment, so far as we are concerned here, by Corporal Henry Weale, of Shotton, Cheshire, and Sergeant William Waring, M.M., of Welshpool. Weale belonged to the 14th battalion, and on August 26, at Bazentin-le-Grand, he was deputed to deal with the machine guns that were preventing an adjacent battalion from moving forward. He did this with such success that all the guns were captured, and the official notice described how the surviving members of the crew took to their heels with this gallant N.C.O. in hot pursuit.

Waring, of the 25th battalion, also led an attack on machine guns, taking the guns and 20 prisoners. Later he was killed while reorganizing the shaken ranks and leading them forward under very heavy fire.

The next award takes us to the Balkans, where in September, 1918, the 7th South Wales Borderers were serving. The battalion was under Lieutenant Colonel D. Burges, D.S.O., and, having been assembled by him without loss, began an advance over very difficult ground. The enemy was in force, and the fire severe and accurate, so the colonel, although wounded, moved about the lines, and by his constant exertions kept it moving in the right direction and in good order. He then led the final stage of the advance until he was again wounded. Sergeant Major J. H. Williams, D.C.M., M.M., of the 10th battalion of the Borderers, rushed a machine gun alone and took 15 prisoners. One of these then turned on him, but after a sharp tussle, in which some of them were badly damaged, the Germans decided to follow the Welshman quietly to the prisoners' cages. This occurred near Cambrai.

There were 23 regiments of the line in which there was one recipient of the Victoria Cross in the period under consideration. Fifteen of these were English, and a group of five from London and neighbourhood can be taken first. The London Regiment supplied one, Private Jack Harvey, of the 22nd battalion—a Camberwell man. Although he rushed a machine gun post near Péronne on September 2, 1918, he was not satisfied with his feat, so he continued his way along a German trench, reaching a well-populated dug-out, where he forced no fewer than 37 of the enemy to surrender. By these two acts of great gallantry he saved his company from heavy casualties and enabled the whole of the attacking line to advance.

Each of the Surrey regiments earned one V.C. during this period. Corporal J. McNamara, of the East Surreys, was with his battalion near Lens on September 3. This time the Germans were attacking, and the corporal, who was just then at the telephone, realizing that the assault, a sudden one, was really being pressed, dashed to the nearest post and took the lead in holding it until reinforcements arrived.

Lance Corporal J. W. Sayer, of the 8th battalion Royal West Surreys, belongs to the highest type of hero. He was killed just after performing superhuman deeds, not in the exhilaration

of victory and advance, but on that dark day, March 21, 1918, when all seemed lost. For two hours he held on to a small isolated post, beating off many attacks and killing many of the enemy who had loomed up in great numbers through the mist. Every kind of fire, as well as bomb and bayonet, was tried against him, but his skill enabled the post to hold out until nearly all the garrison had been killed, and he himself wounded and captured. He died subsequently as the result of wounds received at Le Cateau.

Second Lieutenant F. E. Young was with the 1st Hertfordshires at Havrincourt on September 18, 1918, when a strong counter-attack developed. He did a good deal in warning the garrisons of this movement and encouraging them to resist it, and when it got really close he was prominent in the actual fighting. By his exertions the battalion was able to maintain a line of great tactical value, and after fighting hard for four hours he was last seen, still at it, "hand to hand against a considerable number of the enemy."

Lieutenant Colonel D. G. Johnson, D.S.O., M.C., is another case of a battalion leader earning the V.C. A captain in the South Wales Borderers, he was on November 4, 1918, commanding the 2nd battalion of the Royal Sussex. The order was for the men to cross the Sambre canal, for the Germans were then in full retreat, but just where they came to it the fire was unusually severe. There was some confusion, but the colonel came forward and took the matter in hand. He got the parties, one of Engineers to make the bridges, and the other of infantry to dash across them into order again, and himself led a first assault. This failed, but he tried again, and this time the crossing was accomplished. By a miracle Johnson himself remained unwounded, and his conduct was entirely responsible for turning defeat into victory.

Yorkshire and Lancashire supplied the British army with many soldiers, and it is not therefore strange to find two more regiments recruited in those northern parts still to be mentioned —the Yorkshire and the Royal Lancaster.

Sergeant William McNally, M.M., of the 8th Yorkshires, apparently a collier, was in October, 1918, serving in Italy. He rushed a machine gun on the 27th, thus enabling his company to advance, and two days later he performed a like feat. This did not, however, exhaust his capacity for gallant deeds, and

AIR RAID HAVOC IN LONDON. On March 7, 1918, the Germans carried out one of their many raids on London. Ten bombs were dropped, several on Hampstead and one in Maida Vale. The last bomb, of 660 lb., fell in Wellington Crescent, demolishing four houses as seen in the illustration. At the same time the glass windows in about 1,000 houses were broken or damaged.

Imperial War Museum

A WAR DOG AT WORK. This photograph was taken near Nieppe Wood in May, 1918. A messenger dog, sent down from the trenches, had to negotiate a canal before reaching its objective. The dog is here seen swimming.

Imperial War Museum

DELIVERING THE MESSAGE. Here the dog, having successfully swum the canal (see Plate 58), has delivered the message, which is being read by the soldier. Dogs were utilized in the war when conditions were favourable, and proved themselves as faithful, under a new and dreadful environment, as ever before.

Women carrying sacks of coke at a London gasworks. This grimy work was all part of their war service.

Cleaning and painting a salvaged trawler at Rainham, Essex. Hardly any task came amiss to Britain's women in their eagerness to do their bit

WOMEN ON THE HOME FRONT

" throughout the whole operations his innumerable acts of gallantry set a high example to his men, and his leading was beyond all praise."

Lance Sergeant Thomas Neeley, M.M., of the 8th Royal Lancasters, was another of those who rushed dangerous machine gun posts. This was at Flesquières on September 27, 1918, and his initiative and fighting spirit in dealing, at times alone, with a series of posts " were largely responsible for the taking and clearing of a heavily fortified and strongly garrisoned position, and enabled his company to advance 3,000 yards along the Hindenburg support lines."

A recipient of the Victoria Cross who came from Devonshire was Lance Corporal George Onions, of the 1st battalion of that county's regiment. He was out on a special errand when he saw a great body of Germans advancing. At once he fired on them, and, incredible as it sounds, with only one other man, he took 200 of them prisoner and proudly marched them back to his company commander.

Readers of the awards of V.C.'s as they appeared in the daily papers might have looked in vain therein for the name of Arthur Evans, and yet this Lincolnshire man is among the winners of the cross. As Walter Simpson he enlisted, and it was as Lance Sergeant Walter Simpson that he was known when serving with the 6th battalion of the Lincolns on September 2, 1918, near Etaing. He swam across a river and disposed of a machine gun's crew, and then, being on patrol work, went on his way. He was joined by an officer who was soon wounded, but Simpson got him back to safety, and the patrol brought back the information it was sent out to secure. Later on it was stated that his real name was Arthur Evans.

Lieutenant J. C. Barrett, of the Leicesters, 1/5th battalion, was with an attacking force on September 24, 1918. There was some confusion in the darkness and the smoke of the barrage, but Barrett, although in front of a very strong German position, was not unnerved. He got into the German trench and disposed of two of the machine guns, and then, having been twice wounded, got out of it in order to ascertain the position. Having given the necessary orders to his few men, he found himself unable to move, and had to be carried away. Private Samuel Needham, of the 1/5th Bedfordshires, won his V.C. in Palestine on September 10 and 11, 1918. He was

with a patrol that was suddenly attacked, and it was his prompt action in dashing forward at the foe that enabled the other men to pull themselves together and eventually to get away with their wounded and their own lives.

Four more names and England's record is complete. Lance Corporal William Amey, of the 1/8th Royal Warwicks, won the cross at Landrecies only a week before the armistice of November 11, 1918. First leading, during a fog, his section against a nest of machine guns, he captured 50 prisoners and several guns; later, quite alone, he rushed another post, and then another, returning the last time with 20 Germans.

Another lance corporal was Alfred Wilson, of the 2/4th battalion, Oxfordshire Light Infantry. At Laventie, on September 12, 1918, he advanced on some machine guns which were holding up an advance, and in a series of heroic deeds captured four guns, happily returning to his platoon without injury. Private (Acting Lance Corporal) W. H. Coltman, D.C.M., M.M., of the 1/6th North Staffordshire Regiment, won the cross at Mannequin hill on October 3 and 4, 1918. Three times he carried wounded men into safety, and for 48 hours tended the injured unceasingly.

Private F. G. Miles, of the 1/5th Gloucestershire Regiment, was another of those who tackled the deadly machine guns. Quite alone he put two of these weapons out of action, and then, leading forward his company, he added another 16, to say nothing of 51 prisoners, to his bag. Had the advance here been seriously delayed the whole operation might have failed.

Of the five Scottish regiments now to be mentioned two are Highland units. Lieutenant W. D. Bissett belonged to a Territorial battalion of the Argyll and Sutherland Highlanders, and on October 25, 1918, he led his platoon with great dash near Maing; later, owing to casualties, he took control of the company, and his decision to charge with the bayonet at a critical moment saved a dangerous situation.

Sergeant John Meikle, of the Seaforth Highlanders, 4th battalion, won the cross in France on August 20, 1918, but at the price of his life. He rushed a nest of machine guns alone, but on going forward against another he was killed. Those who followed him, however, finished the work.

Turning to the Lowlands, we come to the Royal Scots Fusiliers, and Sergeant T. Caldwell, of its 12th battalion. On

October 3, 1918, he cleared a farmhouse near Audenarde, and his section captured about 70 prisoners, eight machine guns and one trench mortar. The sergeant himself took 18 prisoners in a singlehanded venture. Private James Towers, of the 2nd Scottish Rifles, volunteered to take a message, although five others had failed to carry it through. Going from cover to cover, he succeeded.

The last of the Scots bears the true Scottish name of McGuffie, a sergeant of the 1/5th battalion, K.O.S.B., who hailed from Wigtown. He was in an advance on September 28, 1918, and, with absolute fearlessness, entered dug-out after dug-out, returning with prisoners. Not only so, but he rescued some British prisoners and led a platoon in a further successful enterprise. Later he was killed by a shell.

When the Germans made their last great bid for victory, on March 21, 1918, and won a startling success, the Ulstermen were in the centre of the danger zone. In the 36th division was the 15th Royal Irish Rifles, and one of its officers, Second Lieutenant E. de Wind, for seven hours, although twice wounded and practically singlehanded, held an important post. He beat back attack after attack and fought on until mortally wounded.

Company Sergeant Major Martin Doyle, M.M., of the 1st Munster Fusiliers, rescued a party surrounded by the enemy, helped a tank that was in difficulty and danger, and silenced a machine gun that was firing on it. He rescued a wounded officer, and, when his position was assailed, drove back the enemy and captured many prisoners. He set " the very highest example to all ranks by his courage."

Sergeant W. A. Curtis, of the 2nd Royal Dublin Fusiliers, was at Le Cateau on October 18, 1918, and his story, although wonderful, is soon told. He rushed through the barrage, silenced six dangerous guns, and then, noticing some German reinforcements just coming up, captured over 100 of them before his comrades joined him.

An Indian soldier, an Anglo-Indian officer and a Newfoundland soldier may here be conveniently grouped together. Badlu Singh was at the time attached to the 29th Indian Lancers, then in Palestine, and on September 23, 1918, his squadron charged a strong position near the Jordan. He, noticing that heavy casualties were being caused by some machine guns, got together six men, and was killed just as the little party had

successfully charged up to the position and had received the surrender of the guns and their crews. The other award was to a British officer, and goes back as far as December 19, 1914, when the Indian troops were in action near Givenchy. Lieutenant W. A. McC. Bruce, of the 59th Scinde Rifles, led a night attack, and, although wounded, held his position against counter-attacks for some hours until he was killed. The Newfoundlander was Private Thomas Ricketts, who was instrumental in capturing five field guns on October 14, 1918.

The 31 Canadians can now be passed rapidly in review, as this work has already dealt with the deeds of this corps, one that contributed so much to the final victory.

Of these honours three were in the nature of arrears. That of Captain E. D. Bellew, of British Columbia, carries us back to April 24, 1915, when the Germans were first using gas against the British lines near Ypres. There Bellew and Sergeant Peerless, in charge of two guns, were in the centre of the attack. All prospect of help had gone, but they decided to stay and fight it out. Bellew, fighting to the last, was taken prisoner.

On October 10, 1916, Private (Piper) J. Richardson, of the 16th battalion Manitoba Regiment, was in Regina trench. During one of the attacks that marked the last stage of the long battle of the Somme, he played his company "over the top," and later, when the men came up against some very strong wire, strode up and down playing his pipes there. The company got through, but Richardson was afterwards missed and his death presumed. On September 20, 1917, Sergeant A. G. Knight, of the Alberta Regiment, led forward a bombing section, and, until fatally wounded, went several times against parties of the enemy. One party he put to rout, from another he took 20 prisoners, and finally, also alone, he sent another group flying in disorder. This was done near Ypres.

The awards for 1918 are crowded together within quite a few weeks, and their number, and still more the deeds of outstanding valour which they describe, show how thoroughly the Canadians were sharers in the final victory of the Allies. The cross of Corporal Joseph Kaeble, M.M., Quebec Regiment, who belonged to a French-Canadian battalion, is dated June 8 and 9, but all the others were during the great offensive that started in August. Kaeble lost his life while resisting a most determined attack at Neuville-Vitasse where he was with a Lewis gun.

He fired his last shots when mortally wounded, and his final words to his companions were, "We must stop them." They did, and the attack was repulsed.

On August 8, the opening day of the British attack, the Canadians won five crosses, and on the 9th two more. Lieutenant James E. Tait, 76th battalion, Manitoba Regiment, showed most conspicuous bravery and initiative in attack, leading his men until he was killed. Lieutenant John Brilliant, M.C., Quebec Regiment, led his company with absolute fearlessness, for 12 miles, dealing with one obstacle after another, always himself taking the positions of danger; wounded again and again, he went on until he died of his many wounds. Corporal H. J. Good, also of the Quebec Regiment, 13th battalion, dashed forward alone against some machine guns, and later captured the crews of three 5.9 in. guns. Private J. B. Croak, another Quebec man, had to his credit two daring feats against machine guns when he was killed. Finally, so far as the five are concerned, Corporal H. B. G. Miner, of the Central Ontario Regiment, was killed after three heroic exploits.

These deeds were all done in the Allied advance from Amiens that began at 4.30 on the morning of August 8, and they serve to give some faint idea of the courage that alone made this forward movement possible. It was indeed no walk-over, but a stern struggle against a desperate and clever foe, and had there been none in the British ranks ready to face almost certain death by rushing against hidden machine guns and cunning defences of other kinds, there would have been no thrills of joy throughout the empire, no British army on the Rhine, no returning victoriously home for millions of soldiers.

On the 9th the advance continued. Two Manitoba men, Corporal F. G. Coppins, of the 3rd battalion, and Corporal A. Brereton, of the 9th, dashed quite separately out to silence machine guns. The action of Coppins "enabled the advance to be continued"; that of Brereton saved many lives and "inspired his platoon to charge and capture the five remaining posts." Sergeant Raphael L. Zengel, M.M., of the 5th battalion Saskatchewan Regiment, performed like deeds, showing, as did the others, "utter disregard for personal safety."

On August 12/13 two notable deeds are recorded in these awards. Sergeant Robert Spall, of Princess Patricia's Regiment, was killed while leading his platoon, which was isolated and

overwhelmed. The men, however, were saved, as Spall "deliberately gave his life" in order to extricate them. Private T. Dinesen, of Quebec, went forward alone against hostile machine guns no less than five times, put them out of action, and with bomb and bayonet accounted for 12 of the enemy. These deeds, one by a Quebec man and the other by an Ontario man, were both done near Parvillers.

On August 26 the Canadians, under Sir Arthur Currie, made a fresh and successful stroke. It is officially recorded that on this day Wancourt was taken, and the name of this place occurs in the V.C. records. Lieutenant Colonel W. H. Clark-Kennedy, C.M.G., D.S.O., was leading forward his battalion, 24th Quebecs, and it was in the centre of a brigade. The hostile fire was very heavy, and there was some disorganization, and here begins the long story of Clark-Kennedy's gallantry. He did everything that could be done until seriously wounded; leading in person parties against nests of machine guns, improving during the night the positions won, rallying his men, so that it was "impossible to overestimate the results achieved by the valour and leadership of this officer."

Lieutenant C. S. Rutherford, M.C., M.M., was at Monchy on the 26th with his battalion, also one from Quebec. He was in charge of an assaulting-party, and came up against a German pill-box. His men were behind, but, undaunted, he called to the Germans that they were his prisoners, and 45 of them with three machine guns surrendered to him. Later he led a section against another pill-box and returned with 35 Germans and some guns.

The next great day in the Canadian advance was September 2. Thereon the Canadian corps, at 5 a.m., moved forward against a part of the Hindenburg line between Drocourt and Quéant, the key of the German position. They had a hard day, but a glorious one. They went right through one of the strongest possible positions, took six miles of the line and 6,000 prisoners. Again the number of V.C.'s won on a single day by the Canadians was five, in addition to one that had been earned on the previous evening.

Private J. F. Young, of Quebec, won the cross for absolute fearlessness in searching for the wounded, dressing their injuries and getting them into safety. He continued his work all through the two succeeding days, September 3 and 4. Private

W. L. Rayfield, of the 7th British Columbia Regiment, rushed a trench quite alone, dealt with a dangerous sniper, took 30 prisoners, and finished by carrying in a wounded man.

Lieutenant Colonel C. W. Peck, D.S.O., commanded the 16th battalion of the Manitoba Regiment in this attack, and its entire success was partly due to him. When the position was critical he made a personal reconnaissance, directed some tanks to the right spot for a successful advance, and under the heaviest fire coolly made plans and gave directions which led to the victory of his brigade. W. H. Metcalf, M.M., was a lance corporal in the same battalion, and was evidently a kindred spirit with his colonel. Although wounded, he walked under terrific fire in front of a tank in order that it should strike the right spot. Captain B. S. Hutcheson, medical officer to the 75th battalion 1st Central Ontario Regiment, won the cross for gallantry in attending to the wounded under heavy fire. "With utter disregard of personal safety he remained on the field until every wounded man had been attended to."

On September 1, just before this attack, the Germans made a movement doubtless to upset it. Private C. J. P. Nunney, D.C.M., M.M., of the 38th battalion Eastern Ontario Regiment, thereupon went from headquarters to the outposts of his company, and by his example showed the men how to see the matter through. In the attack on the next day he was equally daring, ending unfortunately with a severe wound.

Towards the end of the month the Canadians were again heavily engaged, and no less than four awards were made for gallantry on September 27. Lieutenant G. F. Kerr, M.C., M.M., 1st Central Ontario Regiment, won one when commanding a company in Bourlon Wood, where also quite alone he rushed a strong post, returning with four machine guns and 31 prisoners. Lieutenant G. T. Lyall, also a Central Ontario man, was in these Bourlon Wood operations, and his wonderful deeds can only here be summarized. "During two days of operations Lieutenant Lyall captured in all three officers, 182 others ranks, 26 machine guns, and one field gun, exclusive of heavy casualties inflicted. He showed throughout the utmost valour and high powers of command."

The two others are Lieutenant M. F. Gregg, M.C., of Nova Scotia, and Lieutenant S. L. Honey, D.C.M., M.M., of Manitoba. The former, in operations near Cambrai, made, by his skilful

use of bombs, a remarkable haul of prisoners and guns, his deeds covering the period between September 27 and October 1. The latter led his company when all the superior officers had been killed or wounded, carrying on until his death on the last day of the attack; in the interval he went out twice against enemy machine guns.

Captain John McGregor, M.C., D.C.M., of the 1st Central Ontarios, should be linked with those, for he showed "most conspicuous bravery, leadership and self-sacrificing devotion to duty near Cambrai from September 29 to October 3, 1918. Alone he went forward in broad daylight against enemy machine guns, and then gallantly led the first waves of the attack.

The four remaining awards to the Canadians carry the story to November 1, practically to the end. On October 1, Sergeant W. Merrifield, 4th battalion Central Ontario Regiment, showed great gallantry in attack near Abancourt, especially when going singlehanded against two machine gun emplacements. A week later an Engineer, Captain C. N. Mitchell, M.C., found the Germans preparing to destroy a bridge over the Canal de l'Escaut, near Cambrai. By wondrous gallantry he cut away the wires and so saved an important bridge.

Lieutenant W. C. Algie, of the 1st Central Ontario Regiment, was killed near Cambrai, after having settled two machine guns, captured prisoners, and cleared the Germans from one end of a village. Lastly, Sergeant Hugh Cairns, D.C.M., of the 46th battalion Saskatchewan Regiment, was mortally wounded on November 1, after having performed a similar deed. He captured one gun, then two guns, and afterwards, with small parties, took many prisoners.

As regards the Australians, to whom the story may now turn, the 25 crosses awarded to them after August 4, 1918, were all earned between June 26 and October 5 of that year, during an intense 14 weeks for the Anzacs. This narrative, therefore, begins with an award issued from the War Office on August 17, when four crosses were given—all to Australians. Corporal Philip Davey, M.M., of the 10th battalion, A.I.F., was advancing with his platoon at Merris on June 26. As usual, the most dangerous obstacle was machine guns, one of which Davey silenced and captured, afterwards turning the same gun on to the Germans. Lance Corporal T. L. Axford, M.M., of the 16th battalion, performed a very similar feat on July 4. There, too,

during an advance, he rushed against machine guns, and this is the result : " Unaided he killed 10 of the enemy and took six prisoners ; he threw the machine guns over the parapet and called out to the delayed platoon to come on "

Driver Henry Dalziel, of the 15th battalion, won his cross on the same day and in the same area, Hamel Wood, as did Axford. He, too, dashed at a machine gun and killed or captured the entire crew. Later he went under heavy fire to obtain ammunition, and kept on with that work until severely wounded. The last of the four was Corporal W. E. Brown, D.C.M., of the 10th battalion, who, on July 6 at Villers-Bretonneux, compelled the occupants of a dug-out to surrender to him.

These incidents were evidently in operations preliminary to the great Allied offensive that, so far as the British were concerned, began in August. They were part of a move under Rawlinson in which the Australians advanced for more than a mile south of the Somme and captured Hamel. The deed of Lieutenant Albert Borella, M.M., of the 26th battalion, was also performed before the great movements began, for it was on July 17 and 18 that he captured a machine gun, seized a trench and 30 prisoners, and then, his men being in the proportion of one against 10, beat back some determined assaults.

On August 8 Lieutenant A. E. Gaby was at Villers-Bretonneux —the scene, too, of Borella's exploit. His company was checked in an advance, so he went forward alone against the strong position whence the trouble came, and there, firing his revolver, compelled 50 Germans with four guns to surrender. He then led forward his men to their objective, as he did two days later, his gallant life being ended on that day by a sniper's bullet. Private R. M. Beatham, of the 8th battalion, lost his life on August 9 for a like deed. He had tackled the crews of four machine guns and was killed when dashing forward against another.

Sergeant P. C. Statton, M.M., belonged to the 40th battalion, in which he commanded a platoon. Armed with only a revolver, in broad daylight, he at once—a battalion being held up—rushed four enemy machine gun posts in succession, disposing of two of them and killing five of the enemy. " The success of the attacking troops was largely due to his gallantry."

On August 23 the Germans were counter-attacking on the Somme, and the Australians won two V.C.'s when beating them back. Both were by lieutenants—L. D. McCarthy, of the

16th battalion, and W. D. Joynt, of the 8th. McCarthy, with two men, assailed a strong post that was holding up the advance; much of the work he did alone, for one reason or other, and the notice says that "singlehanded" he killed 20 of the enemy and captured in addition five machine guns and 50 prisoners. Joynt led a company in the attack on Herleville Wood. The position was very critical, so he dashed forward and led a magnificent frontal bayonet attack on the wood.

Lance Corporal B. S. Gordon, of the 41st battalion, led a section through heavy shell fire on August 26 near Bray, and then showed remarkable daring in attacking machine guns. "Perfectly unaided, he captured in the course of these operations two officers and 61 other ranks, together with six machine guns, and displayed throughout a wonderful example of fearless initiative." Private G. Cartwright, of the 33rd battalion, was another of those whose gallantry enabled an advance to proceed. He bombed a strong post, captured the gun and nine Germans, doing all under intense fire.

September 1 and 2 were evidently great days for the Australians, for thereon they won no fewer than seven crosses. They attacked and took Mont St. Quentin, a village just north of Péronne, and there many fine deeds were done, of which these seven are outstanding. Private Robert Mactier, of the 23rd battalion, showed "exceptional valour and determination" in dealing with strong enemy positions, and it was entirely due to him that the battalion was able to do its part in capturing the village of Mont St. Quentin. Lieutenant L. T. Towner, M.C., an officer of the Machine Gun Corps, helped considerably in the same attack, showing like gallantry both in manipulating his own guns and in dealing with those of the enemy; while Sergeant A. D. Lowerson, of the 21st battalion, when his men met with severe opposition early in the attack, was equally daring. He led a storming party of seven men against a strong post, which he captured.

Lance Corporal L. C. Weathers, of the 48th battalion, was with an advanced bombing-party on the following day. With three comrades he attacked a strong trench, himself mounted its parapet and bombed it, the result being 180 prisoners and three machine guns. Two corporals, A. C. Hall and A. H. Buckley, both of the 54th battalion, were to the fore on these two days. Hall rushed a machine gun post, carried a wounded

man into safety, and, "continuously in advance of the main party," located posts of resistance and led small parties to assault them. Buckley was killed while trying to rush another of these obstacles; he had just accounted for one of them, and throughout had "displayed great initiative, resource and courage."

The last of the seven heroes of Péronne, as they may be called, is Private W. M. Currey, 53rd battalion. Single-handed, he captured a field gun which had proved very costly to the advance, then rushed a strong point, and finally went out with orders to an isolated company. In all these enterprises he was successful.

Sergeant Gerald Sexton, of the 13th battalion, whose real name, it afterwards transpired, was Maurice Vincent Buckley, won the V.C. near Le Verguier on September 18. He was, we are told, "to the fore, dealing with many machine-guns, rushing enemy posts, and performing great feats of bravery and endurance without faltering or for a moment taking cover." One or two of these feats are described later in the award, one of a long list published on December 14, 1918. Private J. P. Woods also won his V.C. near Le Verguier on September 18. He was in the 48th battalion, and his deed was the capture of a formidable enemy post, which he held with two comrades against heavy counter-attacks.

By this time, the end of September, the Australians, like the Canadians, were crashing through the Hindenburg line. In this move Major B. A. Wark, D.S.O., showed great gifts of leadership, especially on the three critical days, September 29, 30, and October 1. He went forward in front of his men through one village after another, at one time rushing a battery of guns with only a few men, and at another taking 50 prisoners. Private John Ryan, of the 55th battalion, was in this attack. He was one of the first to rush into a German trench which was taken, but he showed perhaps higher qualities later, when he led three men against some bombers who were making his position untenable. He put those men out of action, and was then severely wounded.

The two last Australians to be mentioned are both young officers. Lieutenant Joseph Maxwell, M.C., D.C.M., of the 18th battalion, showed wonderful resource and courage in dealing with hostile machine guns on October 3. Lieutenant G. M.

Ingram, M.M., of the 24th battalion, captured nine machine guns and killed 42 Germans, his platoon assisting, and later did more gallant work.

The deeds of the six New Zealanders cover very much the same period of time as do those of the Australians—to be exact, from July 24, 1918, to September 30; it is worthy of note that five of the six were sergeants. Sergeant R. C. Travis, D.C.M., M.M., of the Otago Regiment, who was killed near Hébuterne, volunteered for a very dangerous piece of work—that of destroying a wire block with bombs. This he did successfully. After which he attacked two machine guns, which he captured, killing four men singlehanded during the operation. He was killed later when going from post to post encouraging his men.

Sergeant Samuel Forsyth was an engineer serving with the Auckland Regiment, and he also lost his life. On August 24 he was at Grévillers, and his award reveals a long record of almost incredible daring in dealing with machine guns. He was wounded early in the day, and after doing good work in directing tanks was killed by a sniper. Sergeant R. S. Judson, D.C.M., M.M., another Auckland man, was instrumental also in rushing machine guns and putting their crews out of action. He won the V.C. near Bapaume on August 26.

Sergeant J. G. Grant, of the 1st battalion Wellington Regiment, led a platoon in an attack near Bancourt on September 1. They came up against machine guns, and it was owing to Grant's courage in dashing forward that the obstacles were overcome. He rushed other posts and "set a splendid example to all." Sergeant H. J. Laurent, of the New Zealand Rifle Brigade, 22nd battalion, won his cross for charging a position, followed by his men, a move that completely disorganized the enemy. The one New Zealand private awarded the V.C. was James Crichton, of the Auckland Regiment. On September 30, during an advance, he was wounded, but he went forward. He swam across a river with a message, and saved a bridge from destruction at Crêvecœur.

PERSONALIA OF THE WAR

In each volume we provide concise and authoritative biographical information concerning the outstanding personalities of the war. For clearness and ready reference they are grouped according to nationality. The most suitable volume in which to include these biographies is that wherein the subjects figure most prominently.

BRITISH

Sir Roger Keyes

SIR ROGER JOHN BROWNLOW KEYES, Bart., was born in 1872. He entered the navy in 1885, and served in the expedition against the sultan of Vitu, East Africa, 1890, and in China, 1900. He was naval attaché at Rome, Vienna, Athens, Constantinople, 1905-7, and became commodore in charge of submarine service, 1912. In the Great War he took part in the battle of Heligoland Bight, and in the raid on Cuxhaven in 1914. In 1915 he was chief of the staff to Admiral de Robeck, eastern Mediterranean squadron, during the operations in the Dardanelles. He became commander of the Dover Patrol in December, 1917, and carried out the naval raid on Zeebrugge and Ostend, April 23, 1918. He was appointed commander of the battle cruiser squadron, Atlantic Fleet, in 1919, resigning in 1921. Promoted rear admiral in 1917, he was knighted after the Zeebrugge exploit, and in 1919 was created a baronet and awarded a grant of £10,000 for his services. He was made an admiral in 1926. From 1921-25 he was deputy chief of the naval staff and a lord commissioner of the Admiralty; he was commander-in-chief of the Mediterranean station, 1925-28, and commander-in-chief of the Portsmouth station, 1929-31. In 1930 he was made an admiral of the fleet.

Sir Hubert Gough

SIR HUBERT DE LA POER GOUGH was born August 12, 1870, of a famous Irish family of soldiers. He was educated at Eton and Sandhurst, and in 1889 joined the 16th Lancers. He served in the Tirah expedition, 1897-98, and afterwards went through the South African War. In 1907 he took over the command of the 16th Lancers. Then serving in Ireland, Gough resigned his commission rather than proceed against Ulster, but, this difficulty adjusted, he took the 3rd cavalry brigade to France in July, 1914. His rise thereafter was rapid, and fully warranted by distinguished service in the field. One of his first encounters was with the Uhlans of the Guard, during the fighting retreat from Mons. In September his brigade played a leading part in driving the Germans northward.

On September 16 General Gough was made commander of the 2nd cavalry division, with the temporary rank of major general, substantive promotion following in October. After holding

command of the 7th division in May, 1915, General Gough was promoted temporary lieutenant general and given the command of the 1st corps, which soon after greatly distinguished itself at Loos. In January, 1916, he was created a K.C.B., and he was one of Sir Douglas Haig's principal subordinate commanders in the battle of the Somme, during which—after the assault of July 1—he commanded the 5th army.

In 1917 his tactics at the third battle of Ypres were criticized as unduly costly, but he was still with his army when the Germans broke through the British line in March, 1918. He did everything possible to stay the rush, but was held responsible for the disaster and recalled. In 1919 he was appointed head of a military mission to co-ordinate Allied effort in the Baltic States. Gough was made a lieutenant general in 1917. He wrote a foreword to W. S. Sparrow's "The Fifth Army in March, 1918," and his own account, under the title of "The Fifth Army," appeared in 1931.

Sir Henry Wilson

SIR HENRY HUGHES WILSON was born May 5, 1864. He was educated at Marlborough, and entered the Royal Irish Regiment, 1884, transferring to the Rifle Brigade in the same year. He served in Burma, 1885-87, and in the South African War. Assistant director of staff duties, War Office, 1904-6; commandant of the staff college, 1907-10; director of military operations, 1910-14, he went to France on the outbreak of the Great War as assistant chief of staff to Sir John French, was later a corps commander, then chief liaison officer with the French supreme command. After a period in command of the eastern division at home, and a visit to Russia with Lord Milner's mission in 1916, Wilson returned to France, 1917, as the British military representative on the Allies' war council at Versailles. This post he vacated in February, 1918, when he succeeded Sir William Robertson as chief of the imperial staff. In February, 1922, he was elected M.P. for North Down. He was assassinated in London, June 22, 1922, and buried in St. Paul's Cathedral. He was knighted in 1915, made a baronet, and promoted field marshal in 1919, and awarded £10,000 for his special war services. His "Life and Diaries" was published in 1927.

Sir James Haldane

SIR JAMES AYLMER LOWTHROP HALDANE was born November 17, 1862, the son of a doctor. He was educated at Edinburgh Academy. From Sandhurst he passed into the Gordon Highlanders in 1882, and served on the Indian frontier

between 1894-98, winning the D.S.O. in the Tirah campaign. He was with the Gordons in the South African War, being severely wounded at Elandslaagte, and escaping from Pretoria in 1900.

Having been on the intelligence staff at headquarters in England, he was sent to watch the operations of the Russo-Japanese War, and on his return was again at the War Office as a general staff officer. In 1912 he took command of the 10th brigade, and in 1914 he took this to France, leading it in the early days of the Great War. In November he succeeded to the 3rd division, and in 1917 took command of the 6th corps, which was under him during the German offensive of 1918. In February, 1920, he was appointed to command the British troops in Mesopotamia, and suppressed an extensive Arab insurrection. Haldane was knighted in 1918 and made general in 1925. He published "How We Escaped From Pretoria," 1900; "A Brigade of the Old Army," 1920, and "The Insurrection in Mesopotamia," 1922.

Sir George Harper

SIR GEORGE MONTAGUE HARPER was born January 11, 1865. He entered the Royal Engineers in 1884. He served in the South African War, 1899-1900, was employed in mobilization duties at army headquarters, 1902-3, and during the next three years was D.A.Q.M.G. (mobilization), and D.A.A.G. staff college. From 1911-14 he was on the general staff at the War Office. In the early months of the Great War he was on the general staff, becoming a brigade commander in 1915. Later he commanded the 51st division, being promoted major general in 1916. He commanded the 4th corps in 1918, and was appointed G.O.C. Southern Command in March, 1919. Harper, who was knighted in 1918, was promoted lieutenant general in January, 1919. He was killed in a motor accident, December 15, 1922.

Sir Ivor Maxse

SIR FREDERICK IVOR MAXSE was born December 22, 1862, a son of Admiral Maxse. He was educated at Rugby and Sandhurst, joined the Royal Fusiliers in 1882, and in 1891 transferred to the Coldstream Guards. Attached to the Egyptian army, he saw active service in 1897-98 and 1899, commanding a regiment of Sudanese and acting as a staff officer in the Nile campaigns. In the South African War he was assistant adjutant general and was in charge of Sir Ian Hamilton's transport during the march from Bloemfontein to Pretoria, afterwards commanding the Transvaal constabulary.

From 1910-14 he was in command of the Guards brigade, and he went to France in August, 1914, at the head of the 1st brigade,

which he led in the retreat and at the Marne and Aisne. In October he was promoted major general and recalled to take charge of the 18th division, a new unit which served with distinction under him in the battles of the Somme. In January, 1917, he was promoted to the 18th corps, which he commanded in the Flanders battles of 1917 and the German offensive of March, 1918. He was then made inspector general of training, and in April, 1919, was appointed to the northern command. In 1917 he was knighted and made a lieutenant general.

Sir Charles Fergusson

SIR CHARLES FERGUSSON was born in Edinburgh, January 17, 1865, and succeeded to his father's baronetcy in 1907. Educated at Eton and Sandhurst, he joined the Grenadier Guards, 1883, and in 1896 transferred to the Egyptian army. He saw service in Egypt, being wounded and winning the D.S.O. He returned to England to take command of the 3rd Grenadiers in 1904. From 1909-13 Fergusson was inspector of infantry, and in 1913 was appointed to the 5th division, which he led in the retreat from Mons. He took over the command of the 2nd corps in 1915, and in 1917 was at the head of the 17th, which he led in the final offensive of 1918. He was military governor of Cologne from 1918 to August, 1919. In 1924-30 he was governor general of New Zealand. He was knighted in 1918.

Sir Frederick Shaw

SIR FREDERICK CHARLES SHAW was born July 31, 1861, and educated at Repton. He entered the Sherwood Foresters in 1882, and almost at once saw service in Egypt. During the South African War he served on the staff, afterwards holding successive staff appointments until, returning to his regiment, he commanded the 2nd battalion, 1907-11. In 1913 he was given command of the 9th infantry brigade, and this he took in August, 1914, to France, where, as part of the 21st corps, it fought under him through the autumn and winter. In 1915 he was promoted to a division. In 1916 he was made chief of the general staff for the home forces, and in May, 1918, was sent as commander-in-chief to Ireland. In 1919 he was made a lieutenant general, having been knighted two years before.

Sir Herbert Watts

SIR HERBERT EDWARD WATTS was born February 14, 1858, his father being vicar of Wisbech. He joined the army in 1880, acted as adjutant to a militia battalion, 1894-99, and served in the South African War, 1899-1902. From 1910-14 he

commanded a district in Great Britain. In the Great War he commanded the 21st infantry brigade in 1914, was promoted to a division, and in 1918 commanded the 19th corps, which he led in the second battle of the Somme. He became major general in 1917, lieutenant general in 1918, was created K.C.B., 1918, and K.C.M.G., 1919.

Sir Herbert Lawrence

SIR HERBERT ALEXANDER LAWRENCE was born August 8, 1861, a younger son of the first Lord Lawrence. He was first gazetted to the 17th Lancers, but he served as an intelligence officer in the earlier part of the South African War, and in the later stages commanded the 16th Lancers. In 1903 he left the service for a business career in London, although for four years he commanded King Edward's Horse.

On the outbreak of the Great War Lawrence rejoined, and as chief of the staff of a division of yeomanry went to Egypt and Gallipoli. He commanded a brigade in Gallipoli, and in September, 1915, was appointed to the 52nd infantry division. He won a high reputation for his masterly conduct of the operations when the peninsula was evacuated. Afterwards he led his men in August, 1916, when they beat back the Turkish attack on the Suez canal. After a year's rest his next sphere of activity was on the western front, and in January, 1918, he was made chief of the staff to Sir Douglas Haig, a post he retained until the end of the war. Knighted in 1917, Sir Herbert in 1919 left the army again, having been promoted general in June of that year, to become a managing partner of Glyn, Mills, Currie & Co., the bankers, to which firm his father-in-law, Lord Hillingdon, belonged. He became, in 1926, chairman of Vickers, Ltd., having just served on the royal commission on the coal industry. Both his sons were killed during the war.

Sir Travers Clarke

SIR TRAVERS EDWARD CLARKE was born April 6, 1871. He joined the Royal Inniskilling Fusiliers as a second lieutenant in 1890. After active service on the Indian north-west frontier, 1897-98, and in the South African War, 1902, he was a staff captain in the Transvaal, 1905-7, and a staff officer at Aldershot, 1912-14. He was assistant quartermaster general, 1914-15, was made quartermaster general to the British armies in France, December, 1917, and in March, 1919, became quartermaster general to the forces, and member of the army council. He was knighted in 1919. He was deputy chairman and chief administrator to the British Empire Exhibition, 1923-25, and he retired from the army in 1926.

Sir William Ironside

SIR WILLIAM EDMUND IRONSIDE was born May 6, 1880. He joined the Royal Artillery in 1899, and served in South Africa, 1899-1902. During the early part of the Great War he was a general staff officer in France. He was promoted brigadier general in command of the 99th infantry brigade in 1918, and was commander-in-chief of the Allied troops at Archangel, October, 1918-October, 1919. After the armistice he defended the port from Bolshevist attacks. In the autumn of 1920 Ironside was put in command of the British forces then engaged in north-west Persia. Some years before the war he was in the British secret service during the German campaign against the Hereros in south-west Africa. He was knighted in 1919 and promoted major general, 1920. From 1922 to 1926 he was commandant of the staff college, Camberley; he commanded the 2nd division at Aldershot, 1926-28, and was commander of the Meerut district, India, 1928-31. In 1933 he became quartermaster general in India. He has published "Tannenberg: the First Thirty Days in East Prussia," 1925.

General Dunsterville

LIONEL CHARLES DUNSTERVILLE was born November 9, 1865. He was educated at the United Services College, Westward Ho, where he had as a schoolfellow Rudyard Kipling, who made him the hero of "Stalky & Co." He entered the Royal Sussex Regiment in 1884, after which he joined the Indian army. He served in the Waziristan expedition, 1894-95, on the north-west frontier, 1897-98; and in China, 1900. In the early part of the Great War he held various appointments in India, then went to Mesopotamia, where, in 1918, he commanded the expedition to Baku. He became a major general in June, 1918. He wrote "The Adventures of Dunsterforce," 1920, and "Stalky's Reminiscences," 1928.

Sir Frederick Maurice

SIR FREDERICK BARTON MAURICE, the eldest son of Sir J. F. Maurice, was born January 19, 1871, and entered the army in 1892. He served with his regiment, the Sherwood Foresters, in the Tirah, 1897-98; and in South Africa. Made a general staff officer in 1908, he held an appointment at the staff college. He went to France in August, 1914, and was chief staff officer of the 3rd division in the retreat from Mons. In December, 1915, he was made director of military operations at the War Office, but in May, 1918, after he had questioned in the

press some statements about the strength of the army in the field made by Lloyd George, an action which led to a critical debate in Parliament, he was placed on retired pay. He then acted as military correspondent to "The Daily Chronicle" and later to "The Daily News." Promoted major general in 1916, he was knighted in the same year. He became president of the British Legion in 1932. in succession to Earl Jellicoe. His works include "The Russo-Turkish War (1877)," 1902; "Forty Days in 1914," 1919; "The Last Four Months," 1919; and "British Strategy," 1929.

Sir Arthur Currie

SIR ARTHUR WILLIAM CURRIE was born at Napperton, Ontario, December 5, 1875. He was educated at Strathroy. In 1893 he settled in British Columbia, where he became the head of a firm of estate agents and president of a mining concern. A member of the Canadian militia, when the Great War broke out he was a lieutenant colonel, and led a Canadian brigade in the second battle of Ypres, 1915. His services in this battle were mentioned in dispatches, and won for him the Commandership of the Bath and the Cross of Commander of the Legion of Honour. In September, 1915, when the 2nd Canadian division arrived in France, and the Canadian corps was formed, Sir E. A. Alderson became the corps commander, and Brigadier General Currie, with the temporary rank of major general, took over the command of the 1st division, which held the post of honour at the battle of Hooge. A 3rd division was constituted in January, 1916; four months later Sir Julian Byng succeeded Sir E. A. Alderson; and in June of the following year Major General Currie was made a K.C.M.G., promoted temporary lieutenant general, and appointed to succeed Sir Julian Byng in the command of the Canadian corps.

In 1918 he forced the switch-line near Quéant, and later played an important part in the capture of Cambrai, October 9. He commanded Canadian forces on the Rhine after the armistice was declared. In 1919 he became inspector general in Canada, and was the first Canadian to win the rank of full general. In 1920 Currie became principal of McGill University, Montreal. He was knighted in 1917.

Sir John Salmond

SIR JOHN MAITLAND SALMOND was born July 17, 1881, a son of Major General Sir W. Salmond, and entered the army in 1901, serving in South Africa in 1901-2. He learnt flying at his own expense and joined the Royal Flying Corps in 1912, becoming instructor at the central flying school at Upavon. He

reorganized the system of training British airmen, and in 1917 became director general of military aeronautics, and a member of the army council. In January, 1918, he succeeded Sir H. M. Trenchard as head of the fighting air force in France, and under him it definitely established its ascendancy over the Germans, helping in the military operations and conducting air raids into German territory. Made a major general in 1918, he became air vice marshal and received the K.C.B. in 1919.

Sir William Salmond

SIR WILLIAM GEOFFREY HANSON SALMOND, the brother of Sir John Salmond, was born August 19, 1878. He entered the army, 1898, and served in the South African War, 1899-1902. He joined the Royal Flying Corps, 1913, and in the Great War, after serving on the staff and commanding a brigade, was, in April, 1918, employed in the air ministry. Appointed to command the Royal Air Force in Egypt in 1919, he made a flight from Egypt to Delhi in December of that year, and was made director general of supply and research, R.A.F., in October, 1921. He became K.C.M.G. and air vice marshal, 1919. He succeeded his brother as air chief marshal in July, 1932, and died April 27, 1933.

Sir William Babtie

SIR WILLIAM BABTIE was born May 7, 1859. He studied medicine at Glasgow University. In 1881 he entered the army medical service, and in 1901 became assistant director general. Meanwhile, he had served in the South African War, in which he won the V.C. for his gallantry in tending the wounded under fire at Colenso, December 15, 1899. In 1907 he was made an inspector of medical services, in 1910 deputy director general of the army medical service, and in 1914 director of medical services in India. In this capacity Babtie was responsible for the care of the wounded in Mesopotamia, and the breakdown of the arrangements in the earlier part of the campaign was the subject in 1917 of a special inquiry, which did not entirely exonerate him. By that time he had been created K.C.M.G. and director of medical services at the War Office. He died on September 11, 1920.

Marquess Curzon

GEORGE NATHANIEL CURZON, Marquess Curzon of Kedleston, was born January 11, 1859. The eldest son of the fourth Baron Scarsdale, he was educated at Eton, and Balliol College, Oxford. After a distinguished university career, he

was elected a fellow of All Souls in 1883. Having travelled in the East, he entered the House of Commons as Conservative M.P. for Southport in 1886. He was under-secretary for India, 1891-92, under-secretary for foreign affairs, 1895-98, and viceroy and governor general of India, 1898-1905. In India he inaugurated administrative reforms and presided over the Durbar held in 1903. His resignation in 1905 was due to a difference of opinion with Lord Kitchener about the control of the army. When created a baron in 1898, Curzon had taken an Irish peerage, but on his return to England he did not, as he could have done, re-enter the House of Commons, but took his place in the Lords as an Irish representative peer. In 1911 he was made an earl, and in 1921 a marquess.

In 1915 Curzon joined the Coalition ministry. At first lord privy seal, and for a time in charge of the air board, he became, when Lloyd George was made premier in December, 1916, a member of the small war cabinet, lord president of the council, and leader of the House of Lords. In 1919 he took charge of the Foreign Office during the absence in Paris of A. J. Balfour, whom later in the year he succeeded as foreign minister. Again lord president of the council, November, 1924, he died March 20, 1925.

In 1907 Curzon was elected chancellor of Oxford University. His writings include "Russia in Central Asia," 1889; "Problems of the Far East," 1894; "Principles and Methods of University Reform," 1909; and "War Poems," 1915. He married Mary Victoria Leiter (d. 1906), and, secondly, Grace, widow of Alfred Duggan. Of his three daughters, Cynthia was married in 1920 to Sir Oswald Mosley, M.P. She died in 1933.

Sir Eric Geddes

SIR ERIC CAMPBELL GEDDES was born in India, September 26, 1875. He was educated at Merchiston Castle School, Edinburgh, and passed some of his early years in the United States in the service of a railway company. After holding a similar post in India, he returned to Britain to enter the service of the North Eastern Railway Co., and in a short time he became its deputy general manager. In 1915 he was given a post in the ministry of munitions, and in 1916 was sent to France as director general of military railways.

Early in 1917 Lloyd George made Geddes controller of the navy, and, later in the year, first lord of the Admiralty. A seat in Parliament was found for him at Cambridge, and he was made a privy councillor. In 1919 he became a minister without portfolio, and he was made first minister of transport in August, 1919. He left political life in 1922 in which year he presided over the committee that suggested cuts in the nation's expenditure.

Returning to business life he became chairman of the Dunlop Rubber Co. and Imperial Airways. In 1916 he was knighted.

Sir Auckland Geddes

SIR AUCKLAND CAMPBELL GEDDES, a brother of Sir Eric Geddes, was born June 21, 1879, and educated in Edinburgh. Having taken a medical degree, he became assistant professor of anatomy there and later professor of anatomy at the Royal College of Surgeons, Dublin. He served in the Great War, and obtained the honorary rank of brigadier general. In 1916 he returned from the front to become director of recruiting at the War Office, and his success there led Lloyd George to make him a member of his government. He became minister of national service in August, 1917; was knighted and obtained a seat in Parliament. In November, 1918, he was made a privy councillor and transferred to the local government board, and in January, 1919, he was made minister of reconstruction. He was appointed president of the board of trade, May 7, 1919, and in that year accepted the position of president of McGill University, Montreal, but withdrew on becoming British ambassador to the U.S.A. in March, 1920. He resigned that post in 1924 and became chairman of the Rio Tinto Co.

Viscount Northcliffe

ALFRED CHARLES WILLIAM HARMSWORTH, Viscount Northcliffe, was born at Chapelizod, Dublin, on July 15, 1865. In 1888 he established the weekly journal "Answers," which achieved great financial success, and was the forerunner of many other periodicals. "Answers" was floated as a limited company and was thus the germ of the gigantic business of the present Amalgamated Press. In 1894 he and his brother Harold, afterwards Viscount Rothermere, acquired the London "Evening News." On May 4, 1896, they founded "The Daily Mail," and in 1908 Lord Northcliffe became chief proprietor of "The Times." In 1904 he received a baronetcy; followed in 1905 by a peerage.

During the war Northcliffe insisted on the most energetic prosecution of operations. He carried out a campaign for munitions in 1915, which compelled him severely to criticize Lord Kitchener's administration at the War Office. He paid numerous visits to the various fronts, and his articles on these war experiences in France and Italy were re-published under the title, "At the War," 1916. Its profits went to the British Red Cross. At Lloyd George's special request, he accepted in May, 1917, the appointment of chairman of the British war mission in the

U.S.A., and arrived in New York on June 11. He controlled British expenditure in the U.S.A., amounting to over £10,000,000 a week, and maintained touch with President Wilson's administration. For these services he was advanced to the rank of viscount.

Offered the appointment of air minister, he declined it, but in February, 1918, he accepted an invitation from Lloyd George to become director of propaganda in enemy countries, on the understanding that he was free to criticize the government. His work in this department, according to German evidence, was partly responsible for the collapse of Germany and Austria in 1918. He died August 14, 1922.

AMERICAN

General Hunter Liggett

HUNTER LIGGETT was born at Reading, Pennsylvania, March 21, 1857. He was educated at the U.S.A. military academy, and entered the army in 1879. He later saw service in Cuba and the Philippines. He was made director and then president of the army war college. In 1918, after leading a corps, he succeeded Pershing as head of the 1st American army in France.

General Peyton March

PEYTON CONWAY MARCH was born at Eastern, Pa., December 27, 1864. He entered the U.S. army in 1888, being appointed to the 3rd artillery battery. He served in the Philippines, was on the general staff, 1903-7, and adjutant general of the department of Missouri, 1911. He served in France as an artillery commander, 1917. In March, 1918, he was appointed acting chief of the staff, and in May general and chief of staff, resigning in 1921.

Herbert Hoover

HERBERT CLARK HOOVER was born at West Branch, Iowa, August 10, 1874. He was educated at the Leland Stanford University, and became a mining engineer. In 1897 he went out to Western Australia, and afterwards to China as engineer to the Chinese imperial bureau of mines. In 1900 he was in Tientsin during its siege by the Boxers.

It was not until the autumn of 1914 that Hoover became known to a wider public, as chairman of the American relief committee in London and commissioner for relief in Belgium.

He returned to the U.S.A. to become food administrator there when that country entered the Great War. Conserving the supplies of food in America, he was able to provide a surplus for feeding Europe. Later he was director of European relief, and in 1921 became secretary of commerce in the Harding administration. In 1928 he was elected president of the United States by a clear majority over Alfred E. Smith, and he was again a candidate in 1932, but on the latter occasion he was defeated by the Democrat, Franklin Roosevelt.

FRENCH

Marshal Foch

FERDINAND FOCH was born at Tarbes on October 4, 1851. A younger brother, Germain, became a Jesuit, a fact of cardinal importance in Foch's career. He was educated first in Valentine, then in St. Etienne, at the Collège S. Michel, which was under the direction of the Jesuits. After taking his degree there he was sent to the Collège de S. Clément at Metz. In 1870 the Franco-Prussian War broke out, and Foch enlisted.

After the war he at once returned to Metz, but at the end of a year entered by request the engineering and artillery establishment at Fontainebleau, which he left as 2nd lieutenant in 1874. He was first attached to the 42nd regiment of artillery stationed at Tarbes, and in 1878 was made captain of the 10th regiment of artillery. He was one of the officers picked for the school of war in 1885, and on leaving it was put on the staff of a division. He was appointed to the general staff in 1894, a year later appointed associate professor, and later full professor, of military history, strategy, and applied tactics at the Ecole Supérieure de Guerre, or staff college.

Foch's lectures there made his name, first in France, then outside. The bulk of them were collected in two books, "The Conduct of War" and "The Principles of War," the latter translated by H. Belloc, 1918. Both have become part of the literature of the art of war. Therein Foch stresses the importance of the moral force in warfare.

In 1901 Foch was sent to command a regiment. It was generally held that his religious belief, and the fact that a brother of his was a Jesuit, were the causes of this transference, which seemed to involve a great setback in his career. In 1903 he was appointed full colonel, in 1905 chief of staff to the 5th army corps, in 1907 brigadier general with a position on the general staff. Clemenceau had just become prime minister, and offered General Foch the command of the Ecole de Guerre. His four and a half years in that position were invaluable to France. He made good officers, and was intensely admired by his pupils. His work was

done when in 1911 he became general of division, in 1912 of the 8th army corps, and in 1913 took command of the 20th army corps at Nancy.

On four critical occasions during the Great War, before he was appointed generalissimo, Foch proved his principles in action, first in the defeated French offensive, and the subsequent defence of Nancy in August, 1914; secondly, at the battle of the Marne in September; thirdly, with the British at Ypres in October of the same year; and fourthly, on the British right flank in the battle of the Somme, which began on July 1, 1916. As soon as Nancy was saved, largely through the 20th corps under Foch, Joffre called on him to form and command a new army, the 9th. This was on August 24. The work was done with amazing speed and thoroughness, and on September 5 the battle of the Marne began, Foch having his headquarters at La Fère. The Germans almost succeeded in breaking the French lines; but Foch attacked and won.

Again on July 1, 1916, Foch shared in one attack, taking the right wing on both sides of the river Somme. His artillery work was so perfect that the first advance of the infantry was singularly bloodless, and the success overwhelming at every point. On September 30, 1916, Foch reached the age limit. He was given the military medal, kept on the active list, but taken from any particular command. On December 13 he became director of a new bureau for the study of inter-Allied questions.

He soon began to press for the creation of a strong Allied reserve, and it was decided early in 1918 to give the command of it when formed to Foch. But other counsels began to prevail, and against his earnest protest the inter-Allied reserve was whittled down. Then came the very critical German offensive on March 21, 1918. The way to Paris lay open, a wedge was driven between French and British, and the imminence of the danger brought about the long desired unity of command.

A momentous inter-Allied conference took place at Doullens on March 26, as the result of which Foch became "Generalissimo of the French, British, American, and Belgian forces fighting upon the western front." After checking the final German offensive opened between Reims and Soissons on July 15, Foch on July 18 launched his decisive counter-offensive on the Marne, the result of which was seen when on October 28 the German message agreeing to an armistice on the basis of President Wilson's Peace note came, and on November 11 the armistice was signed. General Foch, who was elected marshal of France on August 6, showed his great qualities in the peace as in the war. He was the chief cause of the acceptance of the German offer, and largely framed the preliminary terms of peace. He had indeed "deserved well of his country," as the deputies unanimously voted on November 11, 1918.

But he had yet much to do: the organization of the advance to the Rhine and the bridge-heads, repeated conferences at Spa and Trèves with the Germans and Allied leaders. In every act of a continuously strained situation his was the master opinion. Throughout all this strain Marshal Foch, in spite of illness, and even when his son was killed, lost none of his calm, and at every juncture gave those who met him the sense of a man who possessed in himself an inexhaustible reserve of quiet confidence, founded on force of will and clearness of intellect in effective combination. He entertained before the war the highest belief in the splendid fighting qualities of the British soldier, and during the war paid frequent tributes to him. He died in Paris, March 20, 1929, and was buried in the Invalides.

General Mangin

CHARLES MARIE EMMANUEL MANGIN was born at Sarrebourg, Meurthe, July 6, 1866. He entered the army in August, 1885, and passed into St. Cyr in October, 1886. Two years later he was on active service in Senegal, and in the Sudan, 1889-99, and took part in Marchand's expedition to Fashoda. He was in Tongking 1901-4. In 1910 he was a colonel on the West African staff; he served in Morocco, and in August, 1913, was appointed brigadier general, commanding the 8th infantry brigade. He was at the head of that brigade when the Great War broke out.

In the first battle of the Marne he led the 5th infantry division. In March, 1916, he was fighting at Verdun, was made temporary general of division in June, and full general in October. During the Verdun operations he recaptured Douaumont and Vaux. In December, 1916, he commanded the 6th army. Criticized for his conduct in the offensive of April, 1917, he was exonerated after a searching inquiry. In December, 1917, he was placed at the head of the 9th army corps; in June, 1918, was given command of the 10th army; he conducted on June 11 the counter-attack which arrested the German offensive on Compiègne. On August 20 he drove the enemy to the Oise and the Ailette. He was appointed Grand Cross of the Legion of Honour, July, 1919, and commanded the French army of occupation on the Rhine for some months in that same year. He wrote "Comment finit la Guerre," 1920. He died May 12, 1925.

General Degoutte

JEAN MARIE JOSEPH DEGOUTTE was born at Charnay, April 18, 1866. He entered the French army as a volunteer, and in 1890 passed from St. Cyr into the 4th Zouaves. He saw much service in the French colonial possessions, and shortly

after the outbreak of the Great War became chief of the staff of the 4th army corps. Brigadier general in March, 1916, he commanded the famous Moroccan division in August, and was general of division in April, 1918. In the following June he was placed in command of the 6th army at Château-Thierry and commanded it at the second battle of the Marne and took a notable part in freeing Belgium, in October. In May, 1919, he commanded the 3rd army. In 1920 he was commander-in-chief of the armies of occupation in Germany.

General Debeney

MARIE EUGENE DEBENEY was born at Bourg, May 5, 1864. He was educated at St. Cyr, and entered the army as a lieutenant of chasseurs, October 1, 1886. When the Great War broke out he was sub-chief of the staff of the 1st army. He successively commanded the 33rd and 32nd army corps, and the 7th army during 1916, and was placed at the head of the 1st army, December 23, 1917. In March-April, 1918, he was charged with the protection of Amiens and the maintenance of liaison with the British. On August 8 he recaptured Montdidier and carried his line to the Somme. In June, 1919, he was commandant of St. Cyr.

Marshal Weygand

MAXIME WEYGAND joined the army as an artillery lieutenant in 1887. Rising steadily in rank, he was appointed chief of staff to General Foch in October, 1914. He participated in the Ypres and Yser operations in October-December, 1914, in Artois, 1915, and on the Somme, 1916. For a time in the winter of 1917-18 he was France's representative on the Versailles war council, but rejoined Foch in March, 1918. His work in the critical battles of March-October of that year was exceedingly brilliant, but owing to its nature brought him less recognition than he deserved. He was present with Foch at the British peace celebrations in London, July, 1919. In 1920 he went to Poland to advise on military matters.

General Maistre

PAUL ANDRÉ MARIE MAISTRE was born at Joinville, June 20, 1858. He entered St. Cyr in 1877, and joined the army as a lieutenant of the 60th infantry regiment two years later. Colonel in 1909, he was brigadier general and member of the committee of the general staff in 1912. Shortly after the outbreak of the Great War, as temporary general of division, he commanded the 21st army corps, September, 1914, and became

full general in October. In May, 1917, he was placed at the head of the 6th army, and in December, 1917, of the 10th army. In June, 1918, he commanded the group of armies forming the army of the north, and later was president of the higher committee of defence. In June, 1919, he was made inspector general.

General Humbert

GEORGES LOUIS HUMBERT was born at Gaseran, April 8, 1862. He joined the army as a private in the chasseurs à cheval in 1880. He entered St. Cyr in 1881, became a lieutenant of the 102nd infantry regiment in October, 1883, and saw active service in Tongking, 1885-87, Madagascar, 1895-96, and Morocco, 1913-14. Shortly after the outbreak of the Great War he was general of division, and commanded the 32nd army corps. In July, 1915, he was placed at the head of the 3rd army. He was given the task of covering the roads to Paris during the German offensive in March, 1918, and captured Noyon in August. In April, 1919, he was in command of the Allied forces in Hungary, and was made an inspector general, June 10, 1919.

BELGIAN

General Gillain

CYRIAQUE CYPRIEN VICTOR GILLAIN was born August 11, 1857. He entered the army as a private at the age of 18. After three years' service he passed through the military academy, joining the cavalry in 1880. From 1888-96 he served in the Congo, and in 1913 became colonel of the 4th Lancers, which regiment he commanded at the outbreak of the Great War. From October, 1914, he commanded the first cavalry brigade, participating in the battle of the Yser. Major general in 1915, and lieutenant general in 1917, he was placed in command of the 5th division. He succeeded Rucquoy as chief of the staff in April, 1918. By his victory of October 14-16, he freed the Belgian coast from the Germans.

GERMAN

Admiral von Reuter

LUDWIG VON REUTER was born February 9, 1869. He entered the German navy in 1885, and early in the Great War commanded a cruiser squadron. He was appointed commander-in-chief of the naval force which, under the terms of the

armistice, had to be surrendered to the Allies. On November 21, 1918, flying his flag in the battleship Friedrich der Grosse, he delivered up the German fleet to Admiral Sir David Beatty, and later accompanied it to Scapa Flow. On June 21, 1919, von Reuter ordered it to be scuttled. When taken into custody by the British, he stated that he believed from the German newspapers that the armistice had terminated, and he personally gave the order in pursuance of orders given early in the war that no German war vessel was to be surrendered. He returned to Germany in January, 1920. His book, "Scapa Flow," was published 1928.

General von Ludendorff

ERICH VON LUDENDORFF was born April 9, 1865, in the province of Posen. Educated in the cadet school of Plön, he entered the infantry in 1882, and in 1898 joined the general staff, with which he remained, save for brief intervals of active service, till early in 1914, acting as lecturer in the military academy, Berlin, 1906-8, and working, 1904-13, in the operations section which planned the violation of Belgian neutrality. For this a special responsibility attaches to him.

On the German mobilization he was a major general and joined the staff of Bülow's 2nd army. He took part in the attack on Liége, receiving the surrender of the citadel. On August 22, 1914, he was sent as Hindenburg's chief of staff to the Russian front, where he was mainly responsible for the great victory of Tannenburg and for the successes of 1915. With Hindenburg he opposed the attack on Verdun, and, when that attack failed and Rumania entered the war, he, with Hindenburg, was placed in command of the German forces, August 29, 1916.

Ludendorff reorganized the German army and planned the bold strategy which paralysed Rumania, while he held the French front defensively. In 1917, after the completion of the Hindenburg line, he arranged the German retreat to it. Ludendorff devised new methods of attack in 1917, which used surprise to the utmost, employed gas shells on a great scale, and supported the assault of picked shock troops by trench mortars, field guns and machine guns. These methods were successfully tested on the Russian front at the capture of Riga, and in the Caporetto offensive against the Italians.

In 1918, confronted by the failure of the U boat campaign, which he had supported, and strengthened by the collapse of Russia, he determined on a series of offensives on the French front, the prime object of which was to destroy the British army. But his strategy failed; he did not break through at Amiens in March, as he had intended, and, although he inflicted enormous loss on the Allies, his first three offensives did not bring

decisive victory. In July, 1918, he was still confident of success, but now found himself opposed by an abler strategist in Foch, while American troops were pouring into France and while the British brought up 350,000 fresh men.

On July 18, 1918, Foch launched his first counter-stroke with success; Ludendorff from that moment was held, and, as a series of Allied attacks opened along the whole French front, suffered a series of disastrous defeats. The storming of the Hindenburg line in September by the British and the collapse of Bulgaria shook his nerve, so that he called for immediate peace negotiations, but when these were opened he refused his consent, and was dismissed on October 26, 1918.

Ludendorff was a bold, enterprising strategist of great talent but no genius; cold and heartless, lacking the deeper insight which is the mark of the supreme leader. He was directly implicated in the grave war crimes which brought such dishonour on the German nation, and after the armistice plotted constantly against the Allies. His "War Memories" was published, 1919.

General von Hutier

OSCAR VON HUTIER, the son of Coelistin von Hutier, a Prussian officer, was born August 27, 1857. Educated in the cadet corps, he entered the German army as a lieutenant of infantry in 1875. He became lieutenant general in 1912, and also was commander of the 1st Guard division, Berlin. He came into prominence in the summer of 1917, when he conducted an offensive in north-west Russia at the head of the German 8th army, capturing Riga on September 3. It was in this part of the struggle that the new Ludendorff tactics were first employed, and their success led to their being used in the great offensive on the western front in 1918. Hutier was transferred to that front and placed in command of the German 18th army, a new organization specially formed for these tactics. He fought in the second battle of the Somme, March 21, 1918, in the third battle of the Aisne, May-June, and in the German retreat.

General von Gallwitz

MAX VON GALLWITZ was born May 2, 1852, at Breslau, where he was educated. He became lieutenant of artillery in 1872, and in 1883-85 was attached to the general staff. In 1901 he commanded an artillery brigade, and in 1911 was general of artillery and inspector general of field artillery. In the Great War he was prominent as one of Hindenburg's subordinates in the battle of the Masurian lakes in 1915.

In July, 1915, he forced a passage of the river Nareff, cooperating in the general pressure that compelled the Russians to

PRISONERS OF WAR WELCOMED HOME. Women were largely responsible for the immense organization that was built up to transmit parcels, letters, and clothing to prisoners in Germany and Austria. They also carried out much of the work entailed in the administration of internment camps for enemy prisoners in Britain. When the repatriation of men from Germany began, women relatives joined in the work of arranging a welcome and provision for immediate needs. They are seen here serving refreshments to returned prisoners at a railway station

PRESIDENT WILSON ARRIVES IN LONDON. In December, 1918, President Wilson came to Europe at the head of the American delegates to the Peace Conference, where he achieved his main ambition, the foundation of the League of Nations. On his way to Paris he visited King George in London. He is seen here on his arrival, December 26. In the photograph are, from left to right, King George the President, Queen Mary and Mrs. Woodrow Wilson.

evacuate Warsaw early in August. In October he commanded one of the armies which under Mackensen overran Serbia. In 1916 he fought in Galicia against Brusiloff, and later in that year had command of an army on the Somme. After the battle of the Somme he led the German 4th army in the Verdun area, but was defeated there in August-September, 1917, and relieved of his command. He commanded an army group on the western front in the spring of 1918.

General von Einem

Rothmaier Karl von Einem was born at Harzberg in the Harz, January 1, 1853. He entered the Prussian army as a lieutenant of cavalry in 1870. He was chief of the staff of the 7th army corps in 1898, and in 1903 became a lieutenant general, and in the latter year Prussian minister of war. In 1907 he was general of cavalry, and two years later commanded the 7th army corps. In the second battle of the Marne, July, 1918, he commanded the 3rd German army which unsuccessfully attacked the French east of Reims.

General Fritz von Below

Fritz von Below, a son of General Ferdinand von Below, was born at Danzig, September 23, 1853. He was educated in the cadet corps, and entered the German army as a lieutenant of the Guard in 1873. In September, 1912, when he became a general, he was placed in command of the 19th army corps, and during the early part of the Great War was at the head of the German 8th army.

One of Hindenburg's lieutenants, he was prominent in the early operations in east Prussia, winning an engagement sometimes called the battle of Lyck. Later he was active in the Baltic provinces, and in 1915 attacked the Russians on the Dwina, in connexion with an attempt to take Riga, but he was only partially successful. In 1917 he appeared on the western front, and in 1918 he commanded the German army in the third battle of the Aisne in May-June, his attack on Reims failing definitely on June 18. Shortly afterwards he was replaced by von Mudra and was given no other command of importance during the Great War. He died at Weimar, November 23, 1918.

General von Armin

Friedrich Sixt von Armin, son of Heinrich S. von Armin, was born at Wetzlar, November 27, 1841. Joining the army in 1870, he took part in the Franco-Prussian War and was severely wounded at Metz. In 1903 he became major

general and in 1913 commander of the 4th army corps with headquarters at Magdeburg. During the Great War Armin took part in the German advance into Belgium, receiving the surrender of Brussels on August 20. He commanded an army on the Somme in 1916, and in a report on the Somme battles, subsequently made public, paid a high tribute to the British army, which he frankly declared had many points of superiority over his own. He made a strenuous resistance at Passchendaele in 1917, in the third battle of Ypres, and figured prominently in the battles of the Lys in the spring of 1918. After the armistice he retired to a château at Asch, where in March, 1919, he was murdered and the château pillaged by a mob incensed at his high-handed treatment of some peasants who had trespassed on his grounds.

Prince Max of Baden

MAXIMILIAN, prince of Baden, was born July 10, 1867. A nephew of the grand duke Frederick I, he entered the Prussian army, and rose to the rank of general. He also took an active part in the public life of the grand duchy of Baden, becoming president of the upper chamber, in which he delivered a notable speech on the war, December 14, 1917, but was little known in the politics of Germany until, on October 3, 1918, he succeeded Count Hertling as imperial chancellor. His first action was to appeal to President Wilson, through Switzerland, to initiate peace negotiations, and he conducted the difficult questions relating to the armistice and the abdication of the kaiser. He remained in office until the republican government was fully established. He died at Constance, November 6, 1929. In 1900 he married the eldest daughter of the duke of Cumberland.

Count von Hertling

GEORG FRIEDRICH VON HERTLING was born at Darmstadt on August 31, 1843, and educated at the universities of Munich and Berlin. In 1867 he became a lecturer at Bonn, and in 1880 he was chosen professor of philosophy at Munich. By this time he had entered political life, being elected a member of the Reichstag in 1875, and somewhat later he entered the parliament, or diet, of Bavaria. In 1909 Hertling became leader of the Centre party in the Reichstag, and in 1912 he was made premier of Bavaria and minister for foreign affairs. He was then made a count. Hertling was still holding these positions when, in July, 1917, he was asked to take Bethmann-Hollweg's place as imperial chancellor. Already an old man, he refused the offer, but in October it was repeated and he accepted office. His position, with want and discontent increasing all around him, was one of great difficulty, but he held on until

September 30, 1918, when he resigned. He died January 4, 1919, leaving some reminiscences which were published later in the same year. Earlier in life Hertling had written on Aristotle and Albertus Magnus.

Friedrich Ebert

FRIEDRICH EBERT was born at Heidelberg, educated at an elementary school, and was apprenticed to a saddler of that town. In 1892 he became editor of the socialist organ, "Bremer Bürgerzeitung," and in 1894 married Louise Kamp, who, he said, proved his best counsellor throughout his career. In the revolution of 1918 he succeeded Prince Max of Baden as chancellor on November 9, and then became provisional president of Germany. He maintained his position through the stormy days of January, 1919, and at the opening of the new National Assembly at Weimar, February 6, 1919, he made a long protest against the armistice terms, and urged the union of German-Austria with Germany. On February 11 Ebert was elected first president of the German republic. He died February 28, 1925.

Kurt Eisner

KURT EISNER was born in Berlin on May 14, 1867. His correct name was Solomon Kosnowsky, and he was of Galician-Jewish origin. Joining the Socialists he became associate editor of their organ, "Vorwärts." When the Great War broke out he joined his party in supporting it, but before the end he was one of the South German leaders who opposed the kaiser. In January, 1918, he was prosecuted at Munich for inciting munition workers to strike, but was released on the ground that he was a candidate for the Reichstag. On the outbreak of the revolution he himself took the position of prime minister and minister of foreign affairs, and later that of first president of the Bavarian republic. He sought to separate Bavaria from the other German states, and to make separate peace arrangements with the Allies, but without success. He made himself extremely unpopular on account of his revelations as to the origin of the war, and because, at an international socialist conference at Berne, he had urged the German delegates to make a clean breast of Germany's war guilt. He was assassinated on February 21, 1919, by Count Arco whilst on his way to open a conference. His collected writings, two volumes, appeared in 1920.

Richard von Kuhlmann

RICHARD VON KUHLMANN was born at Constantinople, March 17, 1873. He entered a German cavalry regiment, but turned his attention to the diplomatic service in 1899. At the outbreak of the Great War he had been for six years

councillor of the German embassy, after which he held the same post at Stockholm. In 1915-16 he was minister at The Hague, and in November, 1916, was appointed ambassador to Turkey. He was secretary for foreign affairs, August, 1917-July, 1918, and took a prominent part in the negotiations which led to the treaty of Brest Litovsk, and the peace of Bukarest.

AUSTRIAN

The Emperor Charles

CHARLES, emperor of Austria-Hungary, 1916-18, was born August 17, 1887. He was a son of the archduke Otto and a grand-nephew of the emperor Francis Joseph. His mother was Maria Josepha, a princess of Saxony, and he was named Charles Francis Joseph Louis Hubert. He was privately educated and entered the army, but his career therein was uneventful. The death of his father in 1910 brought him nearer to the throne, and in 1914 the murder of his uncle, the archduke Francis Ferdinand, made him the heir to his great-uncle, the emperor Francis Joseph. On the death of that aged monarch in November, 1916, in the midst of the Great War, he succeeded to his distracted inheritance.

Charles, who had hitherto not been prominent in public affairs, endeavoured to restore order and conclude peace. Victory was in the balance and his efforts failed, but in 1917 they were renewed, his brother-in-law, Prince Sixte of Bourbon, acting as intermediary between the Austrian and the French governments, but he was again unsuccessful. In 1918 terms of complete surrender were accepted, and on November 12, 1918, Charles issued his proclamation abdicating the Austrian throne, and four days later abdicated that of Hungary, which he twice attempted to regain in 1921. He died, April 1, 1922. He had married in 1911 Zita, princess of Bourbon-Parma, and their family consisted of several sons and daughters. The eldest son, Francis Joseph, became head of the house of Habsburg in succession to his father.

Conrad von Hötzendorff

CONRAD FRANZ, baron von Hötzendorff, was born at Penzing, near Vienna, November 11, 1852. He entered the Austrian army as a lieutenant of infantry in 1871, and in 1908 became general of infantry and inspector general. He was chief of the general staff from 1912-16, when, on account of the defeat of the Austrians by Brusiloff in Galicia, he resigned. In 1918 Hötzendorff commanded the Austrian forces whose attack on the British and Italians on the Asiago plateau was completely repulsed. His war memoirs appeared 1921-26.

DIARY OF EVENTS
1918

DIARY OF EVENTS

From January 1, 1918, to December 31, 1918

1918

JAN. 1.—General Allenby reports extension of his line north of Jerusalem.

Austrians abandon bridge-head at Zenson loop of Piave.

JAN. 2.—Hitch in peace negotiations between Germany and Bolshevists.

JAN. 3.—Reported that Sir George Buchanan, ambassador at Petrograd, is returning to England.

JAN. 4.—General Allenby reports a further advance on the part of his line north of Jerusalem.

British airmen bomb Metz by night.

British hospital ship Rewa torpedoed.

JAN. 5.—Mr. Lloyd George states the British war aims in speech to trade union leaders.

British attack at Hatum and Jabir (Aden) and destroy defences of former.

JAN. 6.—Day of national intercession and thanksgiving.

JAN. 7.—Lord Reading appointed high commissioner in the United States in the character of ambassador extraordinary and plenipotentiary on special mission.

JAN. 8.—East of Bullecourt the Germans attack British positions in Hindenburg line.

President Wilson's message to Congress on objects of a world's peace.

JAN. 9.—War Office reports renewed Arab activity on Hejaz railway north of Maan ; Turks' communications harassed.

H.M.S. Racoon (destroyer) sunk in snowstorm off north coast of Ireland ; all hands lost.

JAN. 10.—Announced America has an army of 1,500,000 in the field or in training at home or abroad.

General Nivelle to command French army in Algeria.

JAN. 11.—War Office announces new campaign begun against the German forces in Portuguese East Africa.

JAN. 12.—German attack on French on the Chaume Wood front, north of Verdun, repulsed.

JAN. 13.—Peace negotiations continuing at Brest Litovsk.

Admiralty issues detailed statement of changes in the personnel of the board and the alterations in organization.

JAN. 14.—British air raid on Karlsruhe.

M. Caillaux, an ex-premier of France, arrested.

Sir Auckland Geddes, minister of national service, introduces new man-power bill in the House of Commons.

Yarmouth bombarded from the sea at night by German torpedo-boat destroyers; four people killed and eight injured.

British air raid on Metz area.

JAN. 15.—Bolshevist government sends ultimatum to Rumania threatening war, alleging hostile acts against Russian soldiers.

JAN. 16.—Germans raid British post north-west of St. Quentin.

British airmen bomb junction of Bernsdorf, 30 miles south-east of Metz.

JAN. 17.—Germans raid British post east of Epéhy.

Commodore Sir Reginald Y. Tyrwhitt promoted an acting rear admiral.

JAN. 18.—Lord Rhondda, in an important review of the food situation, says there is no fear whatever of a famine.

Russian Constituent Assembly meets, and after declaring its intention not to submit to dictation of Bolshevist minority is dissolved by Bolshevist government.

Advance in Palestine, in neighbourhood of Der'a.

JAN. 19.—Enemy raid south-east of Graincourt (south of Bapaume-Cambrai road) repulsed.

JAN. 20.—Dardanelles sea battle. The Goeben and Breslau, with destroyers, venture into the Mediterranean. The Breslau is mined and sunk : the Goeben escapes badly damaged by mines, and is beached at Nagara Point, where she is attacked by British naval aircraft.

British bombard Ostend from the sea.

JAN. 21.—H.M. armed boarding steamer Louvain torpedoed in eastern Mediterranean ; loss of 224 lives.

Sir Edward Carson resigns from the War Cabinet.

JAN. 22.—Germans raid British post south of St. Quentin.

First meeting of Allied naval council held in London.

JAN. 23.—Germans gain a footing in an advanced element of the French front line east of Nieuport town, but are ejected.

Following changes at British headquarters staff are announced: Lieutenant General Sir H. Lawrence, chief of the general staff; Colonel E. W. Cox, brigadier general, general staff (intelligence) ; Lieutenant General Travers Clarke, quartermaster general.

JAN. 24.—Italians surprise an enemy advanced post at Capo Sile.

Count Hertling (the German imperial chancellor) and Count Czernin reply to Allied war aims.

British night-flying machines raid Mannheim, Treves, Saarbrücken and Thionville.

JAN. 25.—Germans raid British post east of Loos.

JAN. 26.—Announced British front extended to slightly south of St. Quentin.

Cunard liner Andania torpedoed off Ulster coast; two of the crew drowned.

The Goeben refloated.

JAN. 27.—British expedition to Baku sets out from Bagdad.

JAN. 28.—Moonlight air raid on London ; 58 killed and 173

injured, practically all the casualties occurring in the London area. One machine brought down in Essex.

Italian infantry storm enemy's positions on the heights to the east of the Asiago Basin (plateau).

Civil war in Finland. Helsingfors captured by Red Guards and Finnish Senate overthrown.

H.M.S. Hazard, torpedo-gunboat, sunk in English Channel.

JAN. 29.—Moonlight aeroplane attacks against London by about 15 hostile machines, but all fail to get over the metropolis, most of them being turned back by gunfire. Bombs are dropped in the south-western outskirts. Ten persons killed and 10 injured.

JAN. 30.—The greatest strikes since opening of the war reported to have broken out in Germany. They have spread from Berlin to many centres.

Sittings of the Allied conference begin at Versailles.

Four squadrons of German aeroplanes heavily bomb Paris.

JAN. 31.—Announced Brazil to send naval squadron to cooperate with Allied fleets.

Lord Rhondda states that a national system of rationing will shortly be brought into operation.

FEB. 1.—Announced that two British airmen—Lieutenants Scholtz and Wookey—who had to descend in enemy territory, have been sentenced to 10 years' penal servitude for dropping leaflets behind the German lines.

FEB. 2.—The strikes in Germany have reached their climax.

FEB. 3.—Official report of the Supreme War Council in Paris issued, in which it is stated that in view of the speeches of Count Hertling and Count Czernin, the only immediate task is the vigorous prosecution of the war. Complete agreement arrived at on policy to be pursued.

FEB. 4.—Announced H.M. submarine E 14 has been lost in the Dardanelles.

Announced Polish units of Russian army have joined the revolt against the Bolshevists in Russia, and occupy town of Rogatcheff.

FEB. 5.—Hostile artillery very active south-west of Cambrai, north of Lens, and north-east of Ypres.

Anchor liner Tuscania, carrying American troops, torpedoed off the Irish coast. Of 2,397 people on board, 2,235 were saved.

FEB. 6.—Sir Douglas Haig reports enemy artillery active near Ypres and Lens.

FEB. 7.—English troops raid a German post south-east of Quéant.

Announced General Kaledin renounces leadership of Don Cossacks in favour of General Alexeieff, and latter moving on Bolshevist forces towards Moscow.

FEB. 8.—Meat rationing scheme for London and the Home Counties published.

British destroyer Boxer sunk in Channel.

FEB. 9.—Central Powers sign peace with the Ukraine.

FEB. 10.—Lord Beaverbrook appointed minister of propaganda and chancellor of duchy of Lancaster.

Foreign Office provisionally raises embargo on Dutch commercial cables.

Russia out of the war. M. Trotsky states that Russia declares that the state of war with Germany, Austria-Hungary, Turkey and Bulgaria is at an end, although no formal treaty of peace is signed.

Ex-sultan of Turkey, Abdul Hamid II, dies.

FEB. 11.—President Wilson, in address to Congress, replies to speeches of Count Hertling and Count Czernin.

FEB. 12.—British aircraft fly across the Rhine and bomb Offenburg, in Baden.

FEB. 13.—British line in Italy lengthened east of the Montello ridge along the Piave, and extends some miles east of Nervesa.

Backed by American guns, French infantry win from the Germans a dangerous salient between Tahure and the Butte de Mesnil, in eastern Champagne, penetrating nearly a mile into the German third line.

FEB. 14.—Bolo Pasha and his associate Cavallini condemned to death by the court-martial in Paris for high treason.

Sir Cecil Spring-Rice, British ambassador to U.S.A., on leave of absence, dies suddenly at Ottawa.

FEB. 15.—One British trawler and seven drifters while on anti-submarine patrol in the Strait of Dover are attacked and sunk by a flotilla of large German destroyers.

FEB. 16.—German submarine bombards Dover; one child killed, seven persons injured.

Air raid on London by night.

Sir William Robertson resigns as chief of the imperial general staff, and is succeeded by Sir Henry Wilson.

FEB. 17.—Air raid on London.

FEB. 18.—End of Russian armistice; war resumed after noon. A German army crosses the Dwina, and a second starts into the Ukraine. Dvinsk and Lutsk occupied.

Attempted air raid on London. Enemy aeroplanes fail to penetrate the defences of the capital.

Sir William Robertson accepts the eastern (home) command.

Lenin and Trotsky send message to German government to the effect that in the circumstances they are forced to declare their willingness to sign peace upon the conditions dictated.

FEB. 19.—General Allenby's troops advance to the attack on a frontage of 15 miles east of Jerusalem.

FEB. 20.—French carry out a big raid in Lorraine, to the north of Bures and to the east of Moncel; 525 prisoners taken.

Advance on the Euphrates. British troops occupy Khan Abu Rayat, 14 miles from Ramadie, and patrols advance to within 10 miles of Hit.

German armies reported advancing into the heart of Russia, from Riga to Volhynia.

General Allenby's forces within four miles of Jericho, on the edge of the Jordan valley.

Italian air raid on Innsbruck.

FEB. 21.—Announced British line extended from St. Quentin to La Fère.

Fall of Jericho.

FEB. 22.—Scottish troops carry out successful raid near Monchy-le-Preux.

German ultimatum to Bolshevists.

FEB. 23.—Germans attempt raid near Broodseinde, but are repulsed.

FEB. 24.—Russia accepts Germany's terms, conditions of which are territorial, military and economic. In doing so she abandons territories amounting to nearly one-quarter of the total area of European Russia, together with about one-third of its total population.

Trebizond falls to Turkish troops.

It is announced from Germany that the auxiliary cruiser Wolf has returned home after a voyage of 15 months. The British Admiralty issues a list of 11 vessels, being posted as missing, which are presumed to have been sunk by the Wolf in the Indian and Pacific Oceans.

FEB. 25.—Rationing scheme for meat, butter and margarine in London and Home Counties begins.

German troops occupy Reval and Pskoff.

FEB. 26.—Hospital ship Glenart Castle torpedoed and sunk in Bristol Channel, 153 persons missing. She was outward bound and there were no patients on board.

Damage done to Venice by Gotha raid.

FEB. 27.—German attempts to reach new French positions south-west of the Butte du Mesnil stopped by French artillery fire.

FEB. 28.—Japan proposes to other Powers at war with Germany joint military operations in Siberia to save supplies and stores at Vladivostok.

MAR. 1.—Announced Austro-Hungarian troops march into the Ukraine after an appeal by the Ukraine government.

H.M. armed mercantile cruiser Calgarian torpedoed and sunk; 48 lives lost.

MAR. 2.—Peace signed between Russia and Central Powers at Brest Litovsk.

British Palestine advance is now half-way to Shechem.

Rumania accepts the conditions of the Central Powers.

MAR. 3.—British naval aircraft bomb seaplane sheds at Ostend.

Reported that Germans capture Kieff.

MAR. 4.—Haig's dispatch on battle of Cambrai published.

Announced that fighting has taken place on Trans-Siberian railway between Cossack and Bolshevist troops.

MAR. 5.—Sir Eric Geddes, in statement on Navy Estimates in Commons, refers in gravest terms to falling off in ship-building in Great Britain.

A preliminary treaty of peace between Rumania and the Central Powers signed.

MAR. 6.—British raid enemy's trenches east of Bullecourt.

MAR. 7.—Moonless air raid on London ; 20 killed, 45 injured.

Germany and Finland sign a treaty of peace.

MAR. 8.—South of Houthulst forest enemy attack on a front of a mile.

Gotha raid on Paris ; 13 killed, 50 injured.

MAR. 9.—General Allenby's troops on west of Jordan valley continue their march northwards.

British occupy Hit.

MAR. 10.—British raid on Stuttgart, when the Daimler motor works are attacked.

Hospital ship Guildford Castle, homeward bound from East Africa, attacked by submarine near Lundy Island ; she is hit, but manages to reach port.

MAR. 11.—Austrian air raid on Naples ; 16 killed, 40 injured.

Air raid on Paris by several squadrons of Gothas ; 70 killed, 71 injured.

MAR. 12.—Fighting against Bolshevists at Blagovestchensk, on Manchurian frontier, in which Japanese and Chinese volunteers take part.

Zeppelin raid on Yorkshire coast.

Germans occupy Abo (Finland).

Turks retake Erzerum.

MAR. 13.—Germans occupy Odessa.

Zeppelin raid on Hartlepool ; 8 killed, 22 injured.

MAR. 14.—Germans begin heavy bombardment from Vermelles to south of Armentières.

Soviet congress at Moscow ratifies peace treaty by majority of 453.

MAR. 15.—French regain trenches west of Mont Cornillet, in Champagne.

MAR. 16.—French carry out big raids on west of Meuse near Cheppy and Malancourt, and take 160 prisoners.

British air raid on Zweibrücken.

MAR. 17.—British aeroplanes bomb barracks and railway station at Kaiserlautern, in the Rhine Palatinate.

MAR. 18.—The prime ministers and foreign ministers of entente, assembled in London, issue important note on German crimes against Russian people showing how Russia was tricked into a peace treaty. "Peace treaties such as these," the note declares, "we do not, and cannot, acknowledge."

Holland accepts terms for use of Dutch shipping in American and Allied ports, with certain reservations.

British air raid on Mannheim.

MAR. 19.—Mr. Macpherson announces that since October British have made 38 effective raids into Germany, and dropped 48 tons of explosives. Approximately 250 flights have been made and only 10 machines lost.

MAR. 20.—Lord Pirrie appointed controller general of merchant shipbuilding.

U.S.A. seize Dutch ships in United States ports.

MAR. 21.—Great German offensive. Germans attack with 40 divisions on a 50-mile front, from the Scarpe to the Oise. They break through British outpost positions.

Two British and three French destroyers engage force of German destroyers which had bombarded Dunkirk.

British monitors bombard Ostend.

MAR. 22.—Sir Douglas Haig's report on great German offensive refers to exceptional gallantry shown by troops of 24th division in defence of La Verguier, of the 3rd division, and of the 51st division in region of Bapaume-Cambrai road.

Germans penetrate British defences. Powerful hostile attacks delivered with great weight of infantry and artillery break through defensive system west of St. Quentin, British retiring to line of the Somme.

British cross the Jordan.

MAR. 23.—South and west of St. Quentin British troops take up their new positions, and are heavily engaged.

Enemy's long-range gun shells Paris from estimated distance of 75 miles.

MAR. 24.—Enemy overcomes defences of heights of Monchy and converges on old Somme battlefield from Bapaume to Péronne. Péronne lost to British and Ham evacuated, also Chauny.

Cologne raided by British.

MAR. 25.—Continued German advance. Enemy's onslaught felt mainly between Arras and Péronne. South of Péronne Germans who cross the river are driven back. Germans reach, near Maricourt, their original line of July, 1916. Bapaume and Nesle lost.

German long-range gun again bombards Paris.

French evacuate Noyon.

MAR. 26.—British capture Es Salt, half-way between the Jordan and the Hejaz railway.

New battles south of the Somme. Germans heavily attack south of the Somme and take Roye and Chaulnes. Here British, French, and American troops fight shoulder to shoulder. New hostile attacks commence in neighbourhood of Chaulnes.

British troops, moving up the Euphrates from Hit, attack the Turkish positions about Khan Baghdadie, and repulse enemy with heavy loss; 3,000 prisoners taken.

MAR. 27.—German rush checked. At Rosières all enemy's assaults beaten off. Fierce fighting takes place against British positions between Somme and Ancre. The enemy attacks in great strength in neighbourhood of Bucquoy and Ablainzeville, and gains a footing in latter village. The Germans occupy Albert.

French heavily engaged between Roye and Montdidier, and lose latter during the night.

MAR. 28.—Germans attack British on Arras front in great strength, but are repulsed with heavy loss.

MAR. 29.—Germans progress between Albert and the Avre, 11 miles from Amiens.

Paris church hit by German long-range gun; 75 killed, 90 injured.

MAR. 30.—Tenth day of great battle. Strong German attack north of Somme thrown back. South of Somme, British near the river regain ground. On all rest of the front south of the Somme very large German forces attack, but Franco-British completely check them.

MAR. 31.—Franco-British recapture Hangard.

French recapture villages between Montdidier and Lassigny. Enemy's attempts to cross the Oise smashed.

General Foch to co-ordinate action of Allied armies on the western front.

APRIL 1.—Announced British have advanced 73 miles beyond Ana, along the Aleppo road.

APRIL 2.—British capture Ayette between Arras and Albert.

Announced British, having accomplished their raiding operations on Hejaz railway, retire to Es Salt.

APRIL 3.—German naval forces land at Hango.

Finnish White Guards, cooperating with Germans, enter Tammerfors.

APRIL 4.—German offensive resumed. Enemy attacks with 20 divisions along roads leading to Amiens from St. Quentin, Roye and Montdidier. North of St. Quentin-Amiens road British retire in neighbourhood of Hamel-Vaire Wood. Between the rivers Avre and Luce the French yield ground, leaving Morisel and Mailly-Raineval in enemy's hands.

April 5.—Germans attack between Dernancourt and Albert, and near Mesnil and Moyennville with no success.
Japanese and British marines landed at Vladivostok.

April 6.—British retake Aveluy Wood, north of Albert.

April 7.—French withdrawal between the Oise and Coucy forest.
Arab troops occupy Kerak, Turkish headquarters east of the Dead Sea.

April 8.—Great German gunfire along whole British front.
French withdraw from lower forest of Coucy and from Coucy le Château.

April 9.—German blow north of La Bassée. Attacking on front of 10 miles from La Bassée canal to south of Armentières, enemy first penetrates British lines about Neuve Chapelle and Fauquissart, and pushes through towards river Lys.
Mr. Lloyd George introduces man-power bill extending age limit to 50.

April 10.—Germans attack British between Lys river at Armentières and Ypres-Comines canal. British troops pressed back to line of Wytschaete-Messines ridge and Ploegsteert.

April 11.—A second big battle for possession of Messines ridge on Wytschaete-Hollebeke front takes place, the 9th division repulsing enemy with great loss.
Enemy captures Merville and drives British troops back to neighbourhood of Neuve Eglise.
British evacuate Armentières.

April 12.—Germans capture Neuve Eglise.
Gotha raid on Paris; 26 killed, 72 injured.
Zeppelin raid over midlands; 5 killed, 15 injured.

April 13.—Fierce battle for Neuve Eglise.
Major General Sykes, chief of air staff, R.A.F., in succession to Major General Trenchard.
Fall of Batum to the Turks.

April 14.—General Foch, commander-in-chief of Allied armies in France.

April 15.—Bailleul and Wulverghem fall to the Germans.
Germans occupy Helsingfors (Finland).
Count Czernin resigns as foreign minister of Austria-Hungary.
British fleet sweeps the Kattegat and sinks 10 German trawlers.

April 16.—Greek troops capture 10 villages on the Struma.
Germans capture most of Messines ridge and Wytschaete.
A British counter-attack recovers Wytschaete and Meteren.

April 17.—Announced British unable to maintain positions in Meteren and Wytschaete.
Baron Burian succeeds Count Czernin as foreign minister.
Bolo executed in Paris.

April 18.—Attacking between Thennes and Mailly-Raineval on both sides of Avre valley, the French progress on east bank and on west carry their line to outskirts of Castel.
Lord Derby British ambassador to France.
Lord Milner secretary for war.

April 19.—Announced Italian troops to fight in France.
British success at Givenchy.

April 20.—Light forces of British and German navies in touch in Heligoland Bight. A few shots exchanged at extreme range, and one German destroyer hit.

April 21.—Local fighting in neighbourhood of Robecq.

April 22.—Local actions on British front near Festubert.
British destroyers engage and put to flight five Austrian destroyers in Adriatic.

April 23.—Great British naval raid on German submarine bases at Zeebrugge and Ostend.

April 24.—Germans attack on eight-mile front from north of Villers-Bretonneux to west bank of Avre, British yielding village of Villers-Bretonneux.

April 25.—Allied withdrawal in neighbourhood of Kemmel; Villers-Bretonneux regained from enemy.
Lord Rothermere resigns office of secretary of state of air force.

April 26.—Germans gain hill and village of Kemmel and village of Locre, but driven from latter.
Sir William Weir air minister.

April 27.—Germans driven from Voormezeele.
British capture Kifri, on road to Mosul.

April 28.—Germans repulsed at Locre.

April 29.—Thirteen German divisions repulsed with severe loss on 10-mile front from Meteren to Voormezeele.

April 30.—Germans completely repulsed in great battles of the Lys.
British advance east of Jordan.
British continue advance in Mesopotamia and reach the Tauk river.

May 1.—British capture Es Salt.
Germans occupy Sevastopol.

May 2.—French carry the Baume Wood.

May 3.—Turks, reinforced, attack Es Salt, but repulsed with heavy loss.

May 4.—French progress in Locre sector.

May 5.—Lord French lord lieutenant of Ireland.

May 6.—Canadian troops carry out successful raid in neighbourhood of Neuville Vitasse, south of Arras.

May 7.—Peace between Rumania and Central Powers signed at Bukarest.
Germans occupy Rostoff.

MAY 9.—Germans attack north of Kemmel and bend British line slightly at one point.

New blow at Ostend. Naval forces of Dover Command renew attempt to close outlet from Bruges canal at Ostend.

Italians storm Monte Corno.

MAY 10.—French success at Grivesnes, near Montdidier and north-east of Locre.

MAY 11.—British submarine sinks German submarine of the so-called cruiser type in latitude of Cape St. Vincent.

MAY 12.—Italian destroyers attack an enemy convoy off Durazzo, and sink a transport.

MAY 13.—Fresh attempts by Austrians to retake Monte Corno fail.

MAY 14.—Germans attack on a front of nearly a mile south-west of Morlancourt and succeed at one point in entering British positions, but an immediate counter-attack by Australian troops drives out the enemy.

MAY 15.—North of Kemmel French troops advance their line.

MAY 16.—British air raid on Saarbrücken.

MAY 17.—French and Italian troops carry through to completion operations against Austrian positions to west of Koritza, in Albania.

MAY 18.—British air raid on Cologne in broad daylight; 33 bombs dropped.

MAY 19.—During the night Australian troops capture German position at Ville-sur-Ancre.

British occupy Nanungu, von Lettow's headquarters (German East Africa).

Gotha raid on London by from 20 to 30 machines; 44 killed, 179 injured; seven Gothas down.

Two squadrons of Gothas attack British hospitals at Etaples, causing over 300 casualties.

MAY 20.—British air raid on Coblenz and Landau, north-west of Karlsruhe.

MAY 21.—Announced that British have advanced as far as Fathah, 130 miles above Bagdad.

Two squadrons of Gothas attempt to reach Paris; one raider brought down in flames.

MAY 22.—British air raid on important railway triangle at Liège and railway stations at Metz; Mannheim again bombed.

Gotha raid on Paris; one person killed and 12 injured.

MAY 23.—Armed mercantile cruiser Moldavia torpedoed and sunk; 56 U.S. soldiers missing.

MAY 24.—French local successes south-east of Coucy, and the Vosges.

MAY 25.—Italians take Monticello pass.

Transport Leasowe Castle torpedoed in the Mediterranean; 13 officers, 79 other ranks, missing.

MAY 26.—At Capo Sile, north-east of Venice, Italian troops storm Austrian positions to a depth of half a mile.

MAY 27.—Germany reopens her offensive on big scale against Allied armies in west. The main attack is made on wide front between Soissons and Reims; a smaller attack is launched between Locre and Voormezeele, south of Ypres.

MAY 28.—In the centre of the Aisne battleground Germans continue attacks with sustained violence along line of the Vesle, which they cross in region of Bazoches and Fismes.

To west of Montdidier American troops, supported by French tanks, capture on a front of one and a quarter miles the village and salient of Cantigny.

MAY 29.—The Germans continue onslaught between Soissons and Reims, sweeping over Vrégny plateau and taking Soissons on the west; and on the east are encroaching on Reims.

MAY 30.—Germans capture Fère-en-Tardenois and Vezilly.

Greco-French victory at Skra di Legen, south of Huma, 11 miles west of the Vardar.

MAY 31.—Germans reach the Marne on a 10-mile front from a point near Château-Thierry to Dormans.

American transport President Lincoln torpedoed and sunk.

JUNE 1.—Germans take Chouy and Neuilly-St. Front, while the French hold Château-Thierry.

JUNE 2.—Enemy swing their main efforts to south-west across Soissons-Château-Thierry road. The French are driven down valley of the Ourcq, back to edge of forest of Villers-Cotterets and to high ground west of Château-Thierry.

JUNE 3.—French recapture Mont de Choisy. They withstand and inflict great loss on enemy desperately attacking the forest of Villers-Cotterets, both on the north and east.

JUNE 4.—German submarines appear off American coast, and sink some coasting vessels.

JUNE 5.—Enemy firmly held by French, who counter-attack to north of Aisne.

General Sir William Robertson to command forces in Great Britain.

JUNE 6.—Franco-American success in Veuilly La Poterie-Bussiares region.

British air raid on Coblenz.

Hospital ship Königin Regentes mined and sunk.

JUNE 7.—French, British and American troops, holding the flanks of the Aisne-Marne-Reims salient against Germans, assail latter's positions.

JUNE 8.—German attempts to check advance on Chézy-Dammard front defeated.

Hague delegates appointed to discuss prisoners of war hold their first meeting.

JUNE 9.—Enemy attacks French on front of 22 miles from Montdidier to Noyon.

JUNE 10.—Germans bend back French line in centre, and take villages of Méry, Belloy and St. Maur.

Brilliant Australian advance of nearly half a mile in neighbourhood of Morlancourt.

JUNE 11.—French counter-stroke. French, supported by tanks, counter-attack on front of seven and a quarter miles between Rubescourt and St. Maur, reach southern approaches to Le Frétoy, and carry their lines one mile and a quarter east of Méry.

JUNE 12.—Germans gain footing on southern bank of the Matz in village of Mélicocq and make slight progress south of the Aisne, on plateau to west of villages of Dommiers and Cutry.

JUNE 13.—German counter-attack between Courcelles and north of Méry defeated with heavy loss.

JUNE 14.—German offensive between Montdidier and Noyon comes to a halt.

JUNE 15.—Austrian offensive on 90-mile front. Massed attacks of infantry launched from Asiago plateau to the sea.

JUNE 16.—Austrian offensive continuing fiercely; enemy passes to west bank of the Piave, closely pressed by Italians, who take 3,000 prisoners.

JUNE 17.—Italians report Austrian offensive at a standstill in whole of mountain section north of Venetia plain.

French gain ground north of the Aisne.

JUNE 18.—Italians officially report slow Austrian progress.

German attempts to capture Reims fail completely.

JUNE 19.—Austrians make no progress. Allies' prisoners to date 9,011.

JUNE 20.—Severe fighting on the Piave, especially on the two flanks at the Montello and about 15 miles north-east of Venice.

JUNE 22.—Austrian offensive at standstill.

JUNE 23.—General Diaz reports that from the Montello to the sea the Austrian army, defeated and closely pursued by Italian armies, is recrossing the Piave in disorder.

JUNE 24.—Details of Austrian retreat and Italian pursuit issued. Italians recover whole of Montello and bridge-head at Capo Sile.

JUNE 25.—Allied prisoners in Italy now total 20,000.

JUNE 26.—British air raid on Karlsruhe.

JUNE 27.—Air raid on Paris; 25 casualties.

Destroyer action off Belgian coast. Four British destroyers while patrolling off the Belgian coast sight eight enemy torpedo-boat destroyers, and engage enemy at long range.

Hospital ship Llandovery Castle torpedoed. Two hundred and thirty-four persons missing.

JUNE 28.—French attack on front of four and a quarter miles south of the Aisne, from south of Ambleny as far as east of Montgobert, and advance at some points a mile and a quarter in depth.

JUNE 29.—British air raid on gas factory at Mannheim.

Italians regain Monte Bella, on the Asiago plateau, and take 800 prisoners.

JUNE 30.—French gain in region of St. Pierre Aigle.

JULY 1.—Americans carry village of Vaux.

JULY 2.—Italians attack on east of the Brenta from the slopes of Monte Grappa, and capture important points.

French advance near Moulin-sous-Touvent, north of the Aisne.

JULY 3.—Death of Lord Rhondda, food controller.

JULY 4.—Australian troops, assisted by detachments of American infantry, capture village of Hamel and woods of Vaire and Hamel.

JULY 5.—British air raid on Coblenz and Saarbrücken.

JULY 6.—Count Mirbach, German ambassador at Moscow, assassinated.

Italians clear whole of the Piave delta.

Franco-Italian advance in Albania, between the coast and Tomorica valley; over 1,000 prisoners.

JULY 7.—British air raid on Constantinople.

JULY 8.—French success on eastern outskirts of Forêt de Retz. They advance three-quarters of a mile, and capture farm of Chavigny and ridges north and south of the farm.

Czecho-Slovaks occupy Irkutsk.

JULY 9.—Allied gains in Albania.

British gains in neighbourhood of Merris.

Mr. J. R. Clynes new food controller.

Resignation of von Kühlmann, German foreign secretary.

JULY 10.—French gain village of Corcy, north of the Ourcq.

JULY 11.—Australian troops raid enemy lines near Merris.

In Albania French capture crest of Kosnitza; Italians capture heights of Cafa Glumaka, south-east of Berat.

JULY 12.—Presence announced of Allied force on Murman coast.

French capture Castel and Auchin farm, north-west of Montdidier.

JULY 13.—French advance north and south of Longpont.

JULY 14.—British line advanced east of Dickebusch lake.

JULY 15.—German offensive resumed. Germans attack French on a 50-mile front east and west of Reims. To east of latter, between Prunay and Massiges, enemy is held. To west of Reims between Coulommes and Fossoy enemy advances three miles and a half at greatest depth, crossing Marne at Fossoy, where Americans counter-attack.

JULY 16.—Great French defence. West of Reims, Germans are held on most of the front, only making some ground up the river Marne as far as Reine towards Epernay. Franco-American troops regain ground at middle of line south of the river, north of front St. Agnan-La Chappelle, again reaching heights overlooking the Marne valley.

Ex-tsar Nicholas of Russia shot by Bolshevists.

JULY 17.—In region between Reims and the Marne, enemy reaches Nanteuil and Pourcy, but driven back from latter by Italian troops. Germans take Montvoisin.

JULY 18.—Great French counter-attack. General Foch attacks on a front of 27 miles running north to south from Fontenoy to Belleau, west of a line between Soissons and Château-Thierry. The French, under General Mangin, reach Mont de Paris, a mile from Soissons, and the valley of the Crise. At deepest point they advance eight miles.

JULY 19.—French continue their progress between Soissons and Château-Thierry.

British air forces destroy two Zeppelins in sheds at Tondern, Schleswig-Holstein.

JULY 20.—Marne line regained. Germans in retreat recross the Marne, and French hold whole southern bank.

White Star liner Justicia torpedoed and sunk off north of Ireland ; 16 lives lost.

JULY 21.—French retake Château-Thierry.

JULY 22.—Allies cross the Marne at Chassins and Passy, near Dormans. Germans continue retreat to the north and south of Fère-en-Tardenois.

JULY 23.—British regain Marfaux, and French continue advance south of the Ourcq.

French stroke near Montdidier. On a four-mile front they advance towards the Avre valley to a depth of nearly two miles, capturing Mailly-Raineval, Sauvillers and Aubvillers.

JULY 24.—Franco-American troops attack in the Marne salient, and drive enemy towards Fère-en-Tardenois.

JULY 25.—Allies win the forest of Fère.

JULY 26.—Allied advance continued between the Aisne and the Marne.

JULY 27.—Germans in full retreat north of Marne.

JULY 28.—French take Fère-en-Tardenois and force the passage of the Ourcq. Americans cross the Ourcq and take Seringes, Nésles, Sergy and Ronchères.

JULY 29.—Between Soissons and the Ourcq, General Mangin's army, reinforced by British troops, carry German positions north-east of Oulchy-le-Château.

JULY 30.—Allies straighten their line on the eastern wing, and take Romigny, on Dormans-Reims road, and advance north to Saponay. Americans finally retain Seringes

Australians capture Merris, east of Hazebrouck.

Field Marshal von Eichhorn, German military director in the Ukraine, murdered at Kieff.

JULY 31.—Announced that from July 15 (the date of the German offensive) to July 31 the enemy have lost in prisoners 33,400 men, including 674 officers.

AUG. 1.—New Allied advance north of the Ourcq.

Allied naval force attacks Bolshevist batteries 30 miles north of Archangel.

AUG. 2.—French retake Soissons.

AUG. 3.—British patrols reach the Ancre between Dernancourt and Hamel. French reach southern bank of the Aisne.

Ambulance transport Warilda torpedoed; 123 casualties.

AUG. 4.—French reach the Vesle at several points east of Fismes; latter taken by Americans.

AUG. 5.—German rearguards withdraw to north bank of Vesle.

Zeppelin raid on east Anglian coast; one airship brought down in flames, and another damaged.

AUG. 6.—General Foch appointed a marshal.

AUG. 7.—East of Braine, French and Americans cross the Vesle.

AUG. 8.—Great Allied attack. The British 4th army and the French 1st army attack on a 20-mile front from Avre river, at Biaches, to neighbourhood of Morlancourt. Greatest depth of advance is about seven miles.

AUG. 9.—Allied battlefront extended, and the attack is renewed. Canadian and Australian troops capture line of outer defences of Amiens.

English and American troops attack in angle between the Somme and the Ancre, and take Morlancourt.

AUG. 10.—French develop attack south of Montdidier, which falls into their hands, and progress on whole front between Avre and Oise.

British advance their line north of the Somme.

AUG. 11.—Germans heavily attack British positions at Lihons, but are repulsed.

AUG. 12.—British line advanced in neighbourhood of the Roye road and east of Fouquescourt.

Announced British in Siberia join the Czechs on the Ussuri front.

AUG. 13.—French progress to north-east of Gury.

Announced 28,000 prisoners captured by French and British since August 8.

AUG. 14.—Germans evacuate forward positions at Beaumont-Hamel, Serre, Puisieux-au-Mont and Bucquoy.

French progress between Matz and Oise, and capture Ribécourt, and advance north and east of Lassigny Massif.

AUG. 15.—French complete capture of the Lassigny Massif.

United States severs relations with the Bolshevists.

AUG. 16.—Continued progress towards Roye, and between latter and Lassigny.

AUG. 17.—British progress on a front of nearly a mile north of Lihons.

AUG. 18.—New French blow. Attacking in the angle of the Oise and Aisne the French army under General Mangin pushes forward to a point less than a mile south of Carlepont. The plateau to west of Nampcel is occupied, and Nouvron Vingre captured.

AUG. 19.—French, completing successes between Carlepont and Fontenoy, capture Morsain.

British enter Merville.

AUG. 20.—General Mangin's army attacks on a front of 16 miles from region of Bailly as far as the Aisne.

British gain further ground astride the Lys, taking l'Epinette.

AUG. 21.—British 3rd army opens an offensive on a 10-mile front, north of the Ancre and advances three miles; Beaucourt, Bucquoy, Ablainzeville and Moyenneville taken in first stage of advance, and later Achiet-le-Petit and Courcelles.

French enter Lassigny.

AUG. 22.—British attack between Somme and Ancre, and advance two miles on front of over six miles. Albert is reoccupied.

AUG. 23.—Australians capture Bray.

AUG. 24.—Great British advance in Somme sector.

AUG. 25.—British enter Neuville Vitasse, and master whole of road from Albert to south of Bapaume, taking Martinpuich, Le Sars, Warlencourt, Mametz and Mametz Wood. Total prisoners since August 21 exceed 17,000.

General Mangin pressing his advance on line Crécy-au-Mont to Chavigny.

AUG. 26.—British attack along both banks of the Scarpe, and, north of the river, reach outskirts of Rœux; south of the river Canadian divisions take Orange hill, Wancourt and Monchy.

AUG. 27.—British hold outskirts of Bapaume, and capture Rœux, Gavrelle, Longueval and Vermandovillers.

French capture Roye.

AUG. 28.—British take Croisilles, Hardecourt and Curlu; French take Chaulnes and Nesle.

AUG. 29.—Fall of Bapaume and Noyon.

AUG. 30.—British take Bullecourt and Heudecourt, but lose them again. Later Bullecourt is retaken. French enter Chévilly and British enter Bailleul.

M. Lenin shot at in Moscow.

AUG. 31.—British regain Kemmel hill.

SEPT. 1.—Australian troops capture Péronne.

SEPT. 2.—German "switch" line broken. Canadians break through the Drocourt-Quéant line on front of six miles.

SEPT. 3.—South of the Lys river British take Richebourg St. Vaast and establish themselves between La Bassée road and Estaires, which is occupied.

SEPT. 4.—British force passage of the Tortille river and Canal du Nord.

French compel German retreat between Nord canal and the Oise, and from the line of the Vesle.

SEPT. 5.—British advance north and south of Péronne and north-east of Wulverghem. French reach the Aisne between Condé and Vieil-Arcy.

SEPT. 6.—French occupy Chauny, Ham and Tergnier. British capture southern and western portions of Havrincourt Wood.

SEPT. 7.—British reach line Beauvois-Roisel-Havrincourt Wood.

French force passage of St. Quentin canal at Pont de Tugny and St. Simon.

SEPT. 8.—British enter area of defensive systems constructed by them prior to German March offensive on southern portion of battlefront. Prisoners taken during first week of September exceed 19,000.

SEPT. 9.—British capture Gouzeaucourt Wood.

SEPT. 10.—French progress east of Crozat canal, and British north-east of Neuve Chapelle.

SEPT. 11.—British capture Attilly, Vendelles and Vermand. French defeat counter-attack to south-east of Roupy.

SEPT. 12.—Great American offensive. American 1st army, assisted by French units, attacks in the St. Mihiel sector, and advances five miles; 8,000 prisoners taken.

British capture Havrincourt and Moeuvres.

Liner Galway Castle torpedoed; over 154 missing.

SEPT. 13.—Complete success of General Pershing's American 1st army; the St. Mihiel salient flattened out; prisoners increased to 15,000, and 200 guns taken.

Austria issues peace note.

SEPT. 14.—British progress south and north of Holnon Wood.

British evacuate Baku.

SEPT. 15.—British capture Maissemy, and advance astride the Ypres-Comines canal. French capture Vailly and Mont des Singes.

Victory in Balkans. Serbian and French troops carry Bulgarian positions in mountainous zone of the Dopropolje.

SEPT. 16.—Slight advance in neighbourhood of Ploegsteert and east of Ypres. French progress north-east and east of Sancy.

Franco-Serbian advance, on front of 16 miles, reaches depth of five miles. Over 4,000 prisoners and 30 guns taken.

SEPT. 17.—Franco-Serbians reach the Cherna.

SEPT. 18.—British attack between Holnon to Gouzeaucourt, storm outer defences of Hindenburg line, particularly before Le Verguier, Villeret, and Hargicourt, and west and south-west of Bellicourt. Lempire taken ; 6,000 prisoners.

Serbian cavalry reach Poloshko ; another cavalry force approaching Prilep ; Bulgarians in full retreat. British and Greek troops attack west and east of lake Doiran.

SEPT. 19.—Great British attack in Palestine, between Rafat and the sea.

Serbians within eight miles of the Vardar and along the Cherna.

SEPT. 20.—French take Benay, south of St. Quentin.

General Allenby's cavalry occupies Nazareth, Afuleh and Beisan.

SEPT. 21.—The Turkish debacle. British infantry advances in Palestine to the line Beit Dejan-Samaria-Bir Asur, while the cavalry operate south from Jenin and Beisan.

Franco-Serbian armies reach the Vardar in direction of Negotin.

SEPT. 22.—British seize passages of Jordan at Jisr ed Damieh. The Turkish 7th and 8th armies cease to exist.

Bulgarians retreat on 100-mile front, embracing lake Doiran in east and Monastir in west. Allies take Ghevgeli.

SEPT. 23.—French reach the Oise about three miles north of La Fère.

Turks retreat east of the Jordan. In north, British cavalry occupy Haifa and Acre.

French carry Prilep.

SEPT. 24.—Bulgarians retreat in disorder to Strumitza.

French capture Francilly-Selency.

SEPT. 25.—British cavalry occupy Tiberias, Semakh and Es Samrah, on Sea of Galilee ; also Amman, on Hejaz railway.

SEPT. 26.—Franco-American attack in Argonne on 40-mile front, from the middle of Champagne to the Meuse.

British enter Strumitza.

SEPT. 27.—Battle for Cambrai. British attack from Sauchy l'Estrées south to before Gouzeaucourt. Bourlon Wood, Beaucamp and Flesquières captured. The Canal du Nord is crossed, and Sauchy l'Estrée and Sauchy Cauchy are taken.

Americans take Véry, Epionville, and 8,000 prisoners.

In Macedonia the whole Belashitza range is in Allies' hands. Serbians take Deli Carmen.

SEPT. 28.—Belgian and British offensive from Dixmude to Ploegsteert. Belgians capture most of the Houthulst forest.

British capture Gouzeaucourt, Marcoing and Fontaine-Notre-Dame. French capture Somme-Py and heights north of Fontaine-en-Dormois and Malmaison fort.

Bulgarian envoys arrive at Salonica.

SEPT. 29.—British and American troops attack north-west of St. Quentin. Main Hindenburg defences on eastern bank of Scheldt canal stormed by the 46th division.

French occupy forest of Pinon and reach the Ailette.

Allies in Belgium take Passchendaele, Gheluvelt and Messines.

SEPT. 30.—Bulgaria accepts Allied terms, and surrenders.

General Berthelot's army attacks Germans between Vesle and the Aisne. British-Belgian advance reaches the Roulers-Menin road.

OCT. 1.—French troops capture St. Quentin.

British occupy Damascus.

OCT. 2.—German retreat between the Vesle and the Aisne, and from Armentières to the south towards Lens. Fleurbaix is taken. French capture Challerange, in Champagne.

Italian and British warships raid Durazzo.

OCT. 3.—In Champagne, French carry crest of Mont Blanc and, north-west of Reims, Cormicy.

German retreat on Lille.

North of St. Quentin British attack on an eight-mile front, and advance three miles. Sequehart is taken and the Scheldt canal crossed, and Le Catelet and Gouy taken.

Announced Prince Max of Baden appointed German chancellor.

OCT. 4.—British advance towards Lille, occupying Wavrin and Erquinghem. French and American troops advance between Reims and Verdun.

German note to President Wilson inviting opening of peace negotiations.

OCT. 5.—British advance east of the breach in the Hindenburg line and take Beaurevoir and Aubencheul.

King Ferdinand of Bulgaria abdicates in favour of his son, Crown Prince Boris.

Germans retreat on 28-mile front towards the Suippe and the Arnes.

OCT. 6.—French pursuit of enemy along whole of Suippe front. British gain Fresnoy.

OCT. 7.—Heavy fighting continues on the Suippe to north and north-east of Reims.

Beirut occupied by French, Sidon by British.

OCT. 8.—British, French and American troops attack in Picardy on 21-mile front from Cambrai to St. Quentin, inflicting a heavy defeat on enemy.

President Wilson demands explanation of Prince Max's note.

OCT. 9.—Fall of Cambrai to British.

OCT. 10.—British capture Le Cateau.

Irish mail boat Leinster torpedoed; 451 missing.

Oct. 11.—Widespread German retreat. In Champagne, French pressure compels enemy to abandon on a 37-mile front all positions north of the Suippe and the Arnes.

British capture Fessies, and advance north and south of river Sensée.

Oct. 12.—General advance of the French continued. La Fère captured.

British progress towards valley of the Selle and reach outskirts of Douai.

Serbians capture Nish.

German government replies to President Wilson's Note.

Oct. 13.—French capture Laon.

Germans abandon Chemin des Dames, St. Gobain forest, and line of the Suippe.

Oct. 14.—Belgian, French and British forces attack from Dixmude to Wervicq. Roulers and Iseghem are taken.

Italians occupy Durazzo.

Oct. 15.—British capture Menin.

President Wilson's reply to German Note of October 12 published.

Oct. 16.—British, fighting east of Ypres, capture Comines and Welverghem.

French and Belgians take Ingelmunster and Lichtervelde.

To south-west of Lille British cross the Haute Deule canal.

Oct. 17.—Ostend and Douai occupied by Allied forces. Vice Admiral Sir Roger Keyes lands at Ostend; British 5th army occupies Lille.

Oct. 18.—British and American troops continue advance and enter Bazuel.

British occupy Roubaix and Tourcoing.

Zeebrugge and Bruges occupied.

Oct. 19.—Allied advance between the Oise and Le Cateau continued.

French storm the Hunding Stellung.

French reach the Danube in region of Vidin (Bulgaria).

Oct. 20.—British force passage of Selle river five miles from Valenciennes.

The French advance east of Vouziers.

Oct. 21.—German reply to President Wilson published.

Oct. 22.—British enter suburbs of Valenciennes, and north of it penetrate into Raismes forest.

French and Belgian forces attack along line of Lys canal towards Ghent.

Oct. 23.—Big British advance between the Scheldt and Le Cateau.

Oct. 24.—British resume attack on whole front between the Sambre-et-Oise canal and the Scheldt, and overcome enemy's resistance.

President Wilson's reply to German Note of October 21 published.

Allied offensive in Italy on Trentino front and on the Middle Piave.

Oct. 25.—British progress on front south of river Scheldt; Sepmeries and Querenaing captured.

British reach Kirkuk, Mesopotamia.

Oct. 26.—Italians advance in Grappa sector, and hold Asolone and Pertica. They take 4,000 prisoners.

British occupy Aleppo.

General Ludendorff resigns.

Oct. 27.—Italian 10th army, under Lord Cavan, attacks on the Piave, which is crossed at island of Grave di Papadopoli.

British occupy Muslimie station.

General Marshall's eastern column approaches outskirts of Altun Keupri, 60 miles south-east of Mosul.

Oct. 28.—Austria-Hungary capitulation. Austria-Hungary, in reply to President Wilson's Note of October 18, declares herself ready to negotiate a separate armistice.

British take Kalat Shergat, on Tigris.

Oct. 29.—Great Italian advance. Passage of Monticano, north of Oderzo, by 10th army; Mount Cosen and Conegliano captured; 33,000 prisoners.

Oct. 30.—Surrender of Turkish army on Tigris after battle near Kalat Shergat; 7,000 prisoners.

Oct. 31.—Sweeping defeat of Austria. Italians completely break down resistance of Austrians, who are in full retreat from Asiago plateau to the sea; prisoners exceed 50,000. Austrian deputation crosses Italian fighting line for purpose of obtaining an armistice.

Surrender of Turkey. An armistice comes into operation at noon.

Nov. 1.—British reach the southern outskirts of Valenciennes.

Count Tisza, formerly Austro-Hungarian foreign minister, murdered in Vienna.

Serbians reoccupy Belgrade.

Nov. 2.—Franco-American attack makes great progress; Semuy and southern bank of Canal des Ardennes captured.

Fall of Valenciennes to British.

Von Lettow-Vorbeck's force, marching into Rhodesia, attacks frontier post of Fife.

Nov. 3.—Italian troops and naval forces land at Trieste.

Austria surrenders. General Diaz, Italian commander-in-chief, signs an armistice, to take effect at 3 p.m., November 4.

Nov. 4.—British, with Debeney's army on their right, begin great offensive on 30-mile front from the east of Valenciennes to outskirts of Guise. Landrecies is captured.

Franco-American attack between Aisne and Meuse, opened on November 2, completely successful. Argonne cleared of enemy.

Nov. 5.—Germans in full retreat in the west.

Marshal Foch announced as being in supreme strategical direction of all forces operating against Germany on all fronts.

Nov. 6.—Text of armistice terms between Allied Powers and Austria-Hungary published.

Great German retreat continues from the Scheldt to the Meuse.

President Wilson's Note to Germany conveying decision of Versailles conference as to armistice, also stating two qualifications of the terms already laid down.

Americans reach Sedan.

Nov. 7.—British advance five miles, entering Avesnes, taking Bavai, and reaching Haumont, three miles from Maubeuge.

Announced Kiel and Hamburg in hands of committees of workmen and soldiers. Part of German fleet is flying the red flag.

German armistice delegates at Marshal Foch's headquarters.

Nov. 8.—Armistice terms handed to German delegates.

Prince Max of Baden resigns as chancellor.

Revolutionary movement spreading in Germany.

British take Condé and Maubeuge.

Nov. 9.—Abdication of the kaiser, who takes refuge in Holland.

Herr Ebert, a majority socialist, becomes imperial chancellor.

Nov. 10.—British reach Mons.

Revolution in Berlin.

Nov. 11.—Canadians capture Mons.

Hostilities suspended. Armistice between Allies and Germany signed at 5 a.m.; hostilities cease at 11 a.m.

At suspension of hostilities British troops had reached the line—Franco-Belgian frontier east of Avesnes, Jeumont, Givry, four miles east of Mons, Lessines, Grammont.

Allied forces on the Dwina defeat Bolshevists.

Nov. 12.—Coalition ministry formed in Germany.

Abdication of Emperor Charles of Austria.

Thanksgiving service at St. Paul's Cathedral, London.

Nov. 13.—Allied fleet arrives off Constantinople.

Admiralty announces H.M.S. Audacious sunk after striking a mine off north Irish coast on October 27, 1914.

Nov. 14.—General Election fixed for December 14.

British Labour Party, by majority of 1,307,000 votes, decides to "terminate the conditions under which the Party entered the Coalition."

Allied troops in the west begin a forward movement along the whole front.

German force from German East Africa surrenders.

Nov. 15.—British naval representatives meet German delegates off Rosyth to arrange for carrying out the naval terms of armistice.

Nov. 16.—King and queen attend a thanksgiving service of Free Churches at Albert Hall.

Mr. Lloyd George opens government election campaign at Central Hall.

Nov. 17.—Allied armies begin forward movement to Rhine.

Thanksgiving services held throughout the country.

British and Russian troops occupy Baku.

Nov. 18.—British continue their march; Charleroi is reached. Belgians enter Brussels.

Nov. 19.—King and queen of the Belgians enter Antwerp; French troops enter Metz.

King George delivers historic message to empire to both Houses of Parliament.

Nov. 20.—First instalment of German submarines, consisting of 20, surrendered to British off Harwich.

Nov. 21.—Surrender of German fleet. In accordance with naval conditions of the armistice the first and main instalment of the German High Sea Fleet surrenders to Admiral Beatty off the Firth of Forth.

Prorogation of Parliament.

Constantinople occupied by French troops.

Nov. 22.—King Albert re-enters Brussels.

British reach line of the river Ourthe.

Nov. 23.—Announced Mr. Clynes, food controller, and Lord Robert Cecil resign from the ministry.

Nov. 24.—British reach German frontier immediately north of duchy of Luxemburg.

Nov. 25.—Official entry of Marshal Foch into Strasbourg.

British mine-sweepers leave port to clear a passage from Kattegat to the Baltic for British squadron which is to proceed to Kiel.

Nov. 26.—Announced total naval casualties to November 11 are 39,766, and for mercantile marine 17,956.

Bolshevists invade Baltic provinces and take Pskoff.

Nov. 27.—Announced Belgium now clear of German troops. French armies over the German frontier.

Nov. 28.—King George arrives in Paris.

Kaiser formally abdicates.

Nov. 29.—Mr Lloyd George at Newcastle makes statement about punishment of Germans responsible for war crimes.

King Nicholas of Montenegro deposed.

Nov. 30.—Belgian royal family enter Liége.

DEC. 1.—Marshal Foch and M. Clemenceau arrive in London, and are greeted with great enthusiasm. American troops occupy Treves.

DEC. 2.—Allied conference in London.

DEC. 3.—Allied conference ends.

DEC. 4.—President Wilson sails from America to France to discuss with the Allies the terms of peace.

British squadron under Admiral Browning arrives at Wilhelmshaven.

Nomination day for the General Election. Mr. Lloyd George says election will be decided on punishment of enemy for offences, provision for returned soldiers and sailors, and other measures bearing on the war.

H.M.S. Cassandra mined and sunk in Baltic; 11 missing.

DEC. 5.—Mr. Lloyd George issues statement of policy and aims. He states definitely that the kaiser must be prosecuted "for a crime which has sent millions of the best young men in Europe to death and mutilation"; that the Allies have accepted principle that Central Powers must pay the cost of war; a commission of experts to be set up to report on best method of exacting indemnity.

Admiralty announces Goeben surrendered and is interned in Bosphorus, together with all Turkish warships.

DEC. 6.—British troops enter Cologne.

DEC. 7.—Belgian cavalry occupy Meusz and Crefeld.

DEC. 8.—British advanced troops reach the Rhine between Godesberg and Cologne. British cavalry enter Bonn.

DEC. 9.—American 3rd army reaches the Rhine from Rolandseck to Brohl.

DEC. 10.—British naval commission arrives at Hamburg in order to inspect 30 British merchant ships there.

King George returns to London from France and Belgium.

Emir Feisal, third son of king of Hejaz, arrives in England.

DEC. 11.—Belgian troops reach the line Viersen-Dülken.

H.M.S. Hercules, with Allied naval commission on board, accompanied by two destroyers, arrives in Kiel Harbour.

DEC. 12.—British squadron enters Reval.

DEC. 13.—President Wilson at Brest.

American troops cross the Rhine and occupy Coblenz bridge-head.

DEC. 14.—General Election held.

Senhor Sidonio Paes, president of Portuguese Republic, assassinated.

Armistice renewed. A treaty is signed at Treves prolonging armistice until January 17, 1919.

DEC. 15.—Disturbances break out at Dresden owing to food troubles. Five people killed and 14 wounded.

DEC. 16.—General Botha arrives in London.

Freedom of Paris conferred on President Wilson.

Announced British squadron in Gulf of Finland bombards Bolshevist forces invading Esthonia, 60 miles east of Reval.

DEC. 17.—Bolshevist troops cross the Dwina near Frederickstadt.

DEC. 18.—Announced from Berlin that Bolshevist advance is assuming a menacing character.

DEC. 19.—Haig's return home. Field Marshal Sir Douglas Haig and his five army commanders receive enthusiastic welcome at Dover and in London when they return home.

Sir Eric Geddes appointed to co-ordinate the activities of the various government departments in regard to demobilization.

DEC. 20.—Proclamation published, revoking and amending previous proclamations issued during the war, withdrawing all prohibitions imposed on export of manufactured goods, except to Switzerland.

DEC. 21.—Executive committee of Berlin soldiers' council dissolved, and a central council substituted.

Count Brockdorff-Rantzau succeeds Dr. Solf as foreign secretary of Germany.

DEC. 23.—Severe fighting in Berlin between sailors holding the royal palace and Berlin garrison.

DEC. 24.—King's Christmas greeting to the fighting forces published.

DEC. 25.—Sir Douglas Haig issues special army order to the British troops congratulating them on their Victory Christmas Day.

DEC. 26.—President Wilson arrives in London.

DEC. 27.—Important conferences held in London between President Wilson, Mr. Lloyd George and Mr. Balfour.

DEC. 28.—Results of General Election announced. The Coalition Party under Mr. Lloyd George has a majority of 262 over all the other parties.

President Wilson receives address of welcome from City of London.

DEC. 29.—Announced from Berlin that government crisis has been solved by retirement of Independent Socialists from the government.

Announced General Kolchak's troops have captured Perm from the Bolshevists.

DEC. 30.—President Wilson receives the Freedom of the City of Manchester.

DEC. 31.—President Wilson leaves for Paris after his five days' visit to England.

END OF VOLUME FIVE